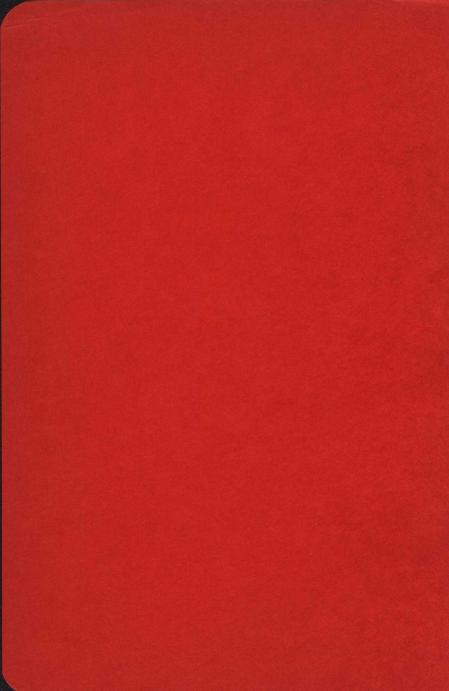


SINCE 1868







Hand Tools Portable Electric Tools Hack Saws



MILLERS FALLS COMPANY

GREENFIELD, MASSACHUSETTS, U.S.A.

CHICAGO OFFICE 100 S. Jefferson Street NEW YORK OFFICE 28 Warren Street

Cable Address: "Millerfall" Greenfield Codes: Acme and Bentley's



IMPORTANT INFORMATION

CATALOG NO. 49

Effective with this new catalog all of the fine tools in our extensive lines which have heretofore borne the famous Goodell-Pratt name will be branded and labeled Millers Falls. This catalog lists all the active items in our lines. All old catalogs should be destroyed.

NEW TOOLS

Many interesting and popular new tools have been added since the publication of our last catalog. These new items are clearly indicated by an appropriate notation in the margin of the pages on which they appear.

SPECIFICATIONS

Our standard specifications for each tool we manufacture are used in this catalog. Owing to difficulties that still exist in securing certain classes and finishes of materials it may be several months, in some few instances, before these specifications are fully met.

PRICES

The list prices shown in this catalog are those in effect at time of publication and are subject to change without notice. All orders are accepted with the understanding that they will be billed at prices prevailing at the time shipment is made.

WARRANTY

Every tool stamped with the Millers Falls name is warranted free from imperfections and defects in material or workmanship. Should such defects appear, we will, at our option, cheerfully repair or replace the tool without charge. Under no circumstances, however, can we assume the responsibility for breakage where flaws do not appear, nor will we replace tools which have suffered from abusive treatment or have been stamped with the owner's name, changed, or otherwise experimented upon. No dealer is authorized to make replacements for us. Articles claimed defective must be returned, charges paid, for inspection, direct to the factory at Greenfield and not to any of our branch offices.

SHIPPING INSTRUCTIONS

In ordering, please be sure to give full and explicit directions for shipment and they will be carefully followed. If shipping instructions are not given, we will use our own best judgment in forwarding shipments. All goods are at the risk of the purchaser after delivery in good order to the forwarders. We cannot hold ourselves responsible for articles lost in transit but will use our best efforts in the interest of the purchaser to locate the goods or have proper restitution made.



IMPORTANT INFORMATION

SERVICE FROM WAREHOUSE

A warehouse stock is maintained in Chicago for the convenience of our customers. Shipments from this tock are subject to a very reasonable service charge. This charge will be quoted on request.

PARTS AND REPAIRS

Repair parts can be furnished for any tool shown in this catalog. Customers should state clearly just what new parts are wanted, giving the number of the tool and any other data that will help avoid error in filling the order. Owing to the considerable expense of round trip transportation, in addition to repair costs, it is recommended that the owner make his own repairs whenever it is possible.

RETURNED GOODS

The return of goods for credit cannot be accepted without permission from the main office. Shipping instructions should be obtained for any goods to be returned for any reason other than for repair.

TERMS

nvoices are payable at the main office in Greenfield, in New York or Boston funds, net 30 days from date rendered or 2 per cent discount payment in ten days.

Shipments are F.O.B. cars Greenfield or Millers Falls, Massachusetts. Freight allowed on one hundred bound shipments of Hack Saw Blades, Electric Tools or Metal Cutting Band Saws. These terms subject to any changes that may become necessary through government regulation.

ELECTROTYPES

The free use of our electrotypes for advertising purposes is extended to all of our customers. Electrotypes of our tools made from fine wood engravings will be supplied in two sizes: the size used in our arge catalog and a small size for use in a 21/4-inch column. We cannot attempt to make up any other special sizes.

INVITATION

A most cordial invitation is extended to Jobbers, Distributors and Dealers to visit our factories and get acquainted with the personnel back of Millers Falls Tools.

MILLERS FALLS COMPANY

October 1949



MILLERS FALLS BENCH PLANES

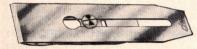
This fine line of planes has an instant appeal to craftsmen who know the true value of fine quality tools and it typifies the excellent design, workmanship and finish that are built into all Millers Falls Tools. These planes are sturdily built for fine performance. They earn through long, satisfactory service a pride of ownership that is the highest tribute that could be paid to their excellence.

Three noteworthy features that contribute to the fine performance of Millers Falls Planes are the exclusive three-point bearing lever cap, preventing chatter; the precisely fitted cutter cap, and the cutter iron which is made of one solid piece of carefully hardened and tempered tool steel nicely polished.

The bottoms are made of seasoned castings, reinforced for added strength, milled and nicely polished on the bottom and two sides. The sensitive, easily operated side and depth adjustments, rigidly seated frogs, self-aligning lever caps and comfortable rosewood knobs and handles all do their part in making this line the last word in planes.

The finish throughout is in perfect keeping with the high standards to which these tools are made.

BENCH PLANE IRONS



Double Iron



Single Iron

The heart of any plane is the cutter iron. Without a fine iron a plane cannot produce the smooth, easy cuts that are expected of an efficient, high quality tool.

Millers Falls Irons are made of one solid piece of selected tool steel heat-treated with the utmost care to the point where they will give excellent results in hardwood and still are not too hard to be honed back into condition readily when dulled. Being of one solid piece the iron is longer lived; therefore it can be sharpened over and over again.

The irons listed below used in Millers Falls Bench Planes can also be used in planes of several other makes.

			Marie Company of the State of t		ALL PROPERTY OF THE PARTY OF TH
Fitting Planes		Double		Single	Irons
Number	Width	Number	Price each	Number	Price each
8-8C-11	1 3/4 "	1168	\$1.30	168	\$0.90
}9-9C-14-14C 814-900	2"	2200	1.40	200	1.00
15-15C	2 1/4"	2228	1.60	228	1.20
10-10C-18-18C 22-22C	2 3/8"	2238	1.80	238	1.30
24-24C	2 5/8"	2258	1.80	258	1.30

Single Irons packed six in a box. Double Irons packed three in a box.

PLANES



MILLERS FALLS
TOOLS
SINCE 1868



SMOOTH PLANES



Quick, easy, depth and side adjustments of irons. Irons one solid piece of high quality tool steel nicely ground and polished. Bottoms and sides milled and well polished. Inside of bottoms finished in glossy black enamel. Adjustable frogs finished in red enamel. Selected rosewood knobs and handles. Lever caps polished, nickeled and buffed.

SMOOTH BOTTOM

		JINOOTH L	MOTION		
	Length	Width Iron	Weight	Code	Price each
No. 8	8"	13/4"	3 1/2 lbs.	EATER	\$6.60
No. 9	9"	2"	3 1/2 lbs.	EAMES	6.90
No. 10	10"	2 3/8"	4 5/8 lbs.	EAMAT	8.40
		CORRUGATE	ВОТТОМ		
No. 8C	8"	134"	3 lbs.	EAWEL	6.80
No. 9C	9"	2"	3 % lbs.	EAMOG	7.10
No. 10C	10"	2 3/8"	4 ½ lbs.	EAWOR	8.70

JACK PLANES



Quick, easy, depth and side adjustments of irons. Irons one solid piece of high quality tool steel nicely ground and polished. Bottoms and sides milled and well polished. Inside of bottoms finished in glossy black enamel. Adjustable frogs finished in red enamel. Selected rosewood knobs and handles. Lever caps polished, nickeled and buffed.

		SMOOTH B	MOTTOL		
No. 11 No. 14 No. 15	Length 11 ½" 14" 15"	Width Iron 1 3/4" 2" 2 1/4"	Weight 3 ½ lbs. 4 ½ lbs. 5 ¾ lbs.	Code EAWIT EAWUG EARLS	\$7.20 7.50 10.50
		CORRUGATED	BOTTOM		
No. 14C No. 15C	14" 15"	2 1/4"	4 3/4 lbs. 5 5/8 lbs.	EAVAD EAVOQ	7.70 10.80

All the above planes packed one in a box



FORE PLANES



Quick, easy, depth and side adjustments of irons. Irons one solid piece of high quality tool steel icely ground and polished. Bottoms and sides milled and well polished. Inside of bottoms finished in plossy black enamel. Adjustable frogs finished in red enamel. Selected rosewood knobs and handles. ever caps polished, nickeled and buffed.

		SMOOTH	BOTTOM		
	Length	Width Iron	Weight 6 5/8 lbs.	Code EABON	Price each
lo. 18	18"	2 3%" CORRUGATE		LABOR	
		CORRUGATE	D BOTTOM		
lo. 18C	18"	2 3/8"	6 1/4 lbs.	EACOR	11.30

JOINTER PLANES



Quick, easy, depth and side adjustment of irons. Irons one solid piece of high quality tool steel nicely ground and polished. Bottoms and sides milled and well polished. Inside of bottoms finished in glossy black enamel. Adjustable frogs finished in red enamel. Selected rosewood knobs and handles. Lever aps polished, nickeled and buffed.

		SMOOTH I	воттом		
	Length	Width Iron	Weight	Code	Price each
No. 22 No. 24	22" 24"	2 3/8" 2 5/8"	7½ lbs. 9¼ lbs.	EADEN EACUL	\$13.40 15.00
		CORRUGATE	D BOTTOM		
No. 22C No. 24C	22" 24"	2 3/8" 2 5/8"	7	EAFER EAGOL	13.70 15.40

All the above planes packed one in a box



ADJUSTABLE THROAT BLOCK PLANES

Designed and used primarily for working cross grain surfaces. Block Planes are invaluable for many light operations cutting with the grain. They are short, light in weight and are easily controlled with one hand. The models below are equipped with adjustable throats for roughing or finish cuts in any kind of wood.

Two cutter iron angles are available — Standard 20° for soft woods and Low 12° for hard woods.



Standard Angle. Adjustable Throat

Side and depth adjustments of irons. Irons one solid piece of high quality tool steel. Bottoms and sides nicely polished. Inside of bottoms and lever caps black enameled. Throat adjusting levers and knurled lock nuts nickel plated.

No. 16	6"	1 5/8 "	1 ½ lbs.	EBENS	\$3.80
No. 17	7"	1 5/8 "	1 ½ lbs.	EBORG	4.00



Standard Angle. Adjustable Throat

Same as Nos. 16 and 17 above but with a polished, nickeled and buffed cap with a knuckle joint lever damp. Irons one solid piece of fine tool steel.

No. 36 .6 No. 37 7	Width Iron 1 5⁄8″ 1 5∕8″	Weight 1 ½ lbs. 1 5/8 lbs.	Code EBRAG EBREL	Price each \$4.50 4.70
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Low Angle. Adjustable Throat

Screw depth adjustment of irons. Irons fine tool steel set at 12° angle. Bottoms and sides nicely polished. Inside of bottoms and lever caps black enameled. Throat adjusting levers and lock nuts nickel plated.

No. 56 No. 57	6" 7"	1 3/8" 1 5/8"	1 1/4 lbs. 1 3/8 lbs.	ECROW ECTOL	Price each \$3.80 4.00
				lett all the state of the lands	



NOS. 45 and 75 BLOCK PLANES



Standard Angle. Rosewood Knobs

Screw depth adjustment of tool steel irons. Cam lock lever caps. Rosewood knobs. Bottoms and sides nicely polished. Inside bottoms and lever caps black enameled.

	Length	Width Iron	Weight	Code	Price each
No. 45	51/2"	1 3/8"	1 1/8 lbs.	EDROX	\$2.70
No. 75	7"	1 5/8"	1 ½ lbs.	EDRAL	2.70

BULL NOSED RABBET PLANE

Especially well adapted for working in close quarters and up into corners. It has an adjustable throat.



Nicely polished bottom and sides. Body and lever cap black enameled. Solid tool steel cutter iron.

Nickel plated clamp and throat adjusting screws.

Width Iron Length

Weight 5/8 lb.

Code EFACE Price each \$1.70

ADJUSTABLE BLOCK AND RABBET PLANE

This unique plane has its solid tool steel cutter iron ground at an angle which gives an easy skew or shave cut. As illustrated it is used as a block plane. The right-hand side, however, is removable converting it into a rabbet plane.



Standard Angle. Screw Depth Adjustment

Screw depth adjustment of solid tool steel cutter iron. Rosewood knob handle. Bottom and sides nicely polished with inside and lever cap black enameled. Cap lever screws and side lock screws

nickel plated.

No. 07

No. 4

Width Iron 1 3/4"

Weight 1 1/2 lbs.

Code **ESCOW** Price each \$4.60

All of the above planes packed one in a box



ADJUSTABLE BLOCK PLANES





Standard Angle. All Steel Construction

The unbreakable all steel construction of this fine little plane makes it particularly suited for use in manual training shops as well as for skilled craftsmen. Screw depth adjustment of tool steel iron. Bottom and sides nicely polished. Drop forged frog. Steel knob, screw lever cap and adjusting nut nickel plated.

| Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated. | Steel knob, screw lever cap and adjusting nut nickel plated nickel

Length Width Iron Weight
No. 206 6 1/4" 1 5/6" 1 lb.

EDFLO \$4.00



Standard Angle. Lever Depth Adjustment

Lever depth adjustment of solid tool steel cutter iron. Screw operating cap clamp nickel plated. Bottom nicely polished with sides and inside and cap black enameled.

 Length
 Width Iron
 Weight
 Code
 Price each

 No. 55
 5 ½"
 1 ¾"
 ½ lb.
 EDELS
 \$1.90



Standard Angle. Lever Depth Adjustment

Lever depth adjustment of solid tool steel cutter iron. Bottom and sides nicely polished with inside black enamel. Black enameled cap clamp operated by nickel plated screw. Rosewood knob handle.

All of the above planes packed one in a box



ETCAB

\$2.00

NON-ADJUSTABLE BLOCK PLANES

nese short length, inexpensive planes will be found particularly useful in pattern work and model uilding or where the work is in close quarters. They are light in weight and fit into the hand snugly.



Standard Angle

Bottoms nicely polished. Sides and clamps black enameled. Screws operating cap clamps nickel lated. Solid tool steel cutter irons.

A CONTRACT MINER	Length	Width Iron	Weight	Code	Price each
lo. 33	31/2"	1"	3/8 lb.	EDOOL	\$0.90
lo. 5	51/2"	1 3/8"	7∕8 lb.	EDWAD	1.50



Standard Angle

Bottom and sides polished. Lever cap and hardwood knob handle black enameled. Solid tool teel cutter iron. Screws operating cap clamp nickel plated.

Length Width Iron Weight Code Price each

1 3/8 lbs.



1 5/8"

7"

lo. 700

Standard Angle

Bottom and sides nicely polished with inside and lever cap black enameled. Rosewood knob handle, solid tool steel cutter iron. Nickel plated clamp screw.

 Length
 Width Iron
 Weight
 Code
 Price each

 No. 87
 7"
 1 %"
 1 ¼ lbs.
 EDOLT
 \$2.30



DOUBLE END BLOCK PLANE

This combination plane has two throats and two cutter seats. As illustrated it is an ordinary block plane but when the cutter iron and lever cap are set up in the seat at the other end it becomes a bull-nosed rabbet plane.



Standard Angle

Bottom and sides nicely polished with inside and lever cap black enameled. Rosewood knob handle. Solid tool steel cutter iron. Nickel plated clamp screw.

No. 68

Length 8" Width Iron

Weight

Code EDFEN Price each

RABBET AND FILLISTER PLANE



This Millers Falls Plane has every desirable feature in a rabbet plane built into it. It is equipped with two cutter seats — a rear seat for regular work with a lever adjustment of the blade for depth, and a forward seat for bull-nosed work.

The fence is adjustable on the steel arm. The steel arm and the fence can be used on either side of the plane as the work requires. When the arm and fence are entirely removed, the plane can be used for a wide variety of uses. A three-point spur and a depth gauge are also part of the equipment. The depth gauge can be removed entirely when desired.

Body of plane nicely finished in black enamel. Bottom and both sides accurately ground. Trimmings and small steel parts nickel plated.

No. 85 Rabbet

Length 81/2" Width Iron

Weight 3 lbs.

EDMAN

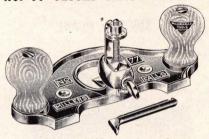
Price each \$5.40



ROUTER PLANES

outer Planes are designed to level off and smooth the bottoms of grooves or slots parallel to the orking surface. Two screw holes are provided in the body so that wood bottoms can be attached for creasing the bottom area allowing large areas to be worked, or fences can be attached for following raight or irregular edges.

NO. 77 CLOSED THROAT ROUTER



hree cutter irons, $\frac{1}{4}$ " and $\frac{1}{2}$ " wide and a $\frac{1}{2}$ " pointed smoother, are provided. Depth of cut is ontrolled by a screw adjustment. Two seats are provided for the cutters, front for regular work and ear for bull-nosed work. A fence which can be attached to the bottom for following straight or urved edges is regular equipment.

Bottom nicely polished. Mahogany lacquered hardwood handles. Frame nickel plated.

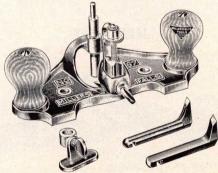
0.77

1/4", 1/2", 1/2" Point Packed one in a box

Weight 2 1/8 lbs. EFRAD

Price each \$5.30

NO. 67 OPEN THROAT ROUTER



hree cutter irons, $\frac{1}{4}$ " and $\frac{1}{2}$ " wide and a $\frac{1}{2}$ " pointed smoother, are provided. Depth of cut is conrolled by a screw adjustment. Two seats are provided for the cutters, front for regular work and rear or bull-nosed work. Throat can be closed for narrow work by installing attachment supplied. A fence which can be attached to the bottom for following straight or curved edges is regular equipment. Bottom nicely polished. Mahogany lacquered hardwood handles. Frame nickel plated.

No. 67

Cutters 1/4", 1/2", 1/2" Point

Packed one in a box

Weight 21/4 lbs.

Code **EFRUE**

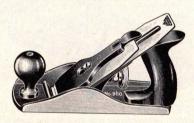
\$6.50



BENCH PLANES

This Smooth Plane and Jack Plane are good tools, capable of first class performance and are the equal of most standard planes. They do not embody all of the features of the preceding Millers Falls Plane and the overall finish is not so high which permits their being offered at a lower price.

SMOOTH PLANE



Depth and side adjustment of iron. Cutters one solid piece of tool steel. Bottom and sides polished Inside of bottom, lever cap, and frog black enameled. Knob and handle black enameled hardwood. Furnished with smooth bottom only.

No. 900

Length O# Width Iron 2" Weight 4 lbs.

Code ETDES Price each

Packed one in a box

JACK PLANE



Depth and side adjustment of irons. Cutters one solid piece of tool steel. Bottom and sides polished. Inside of bottom, lever cap, and frog black enameled. Knob and handle black enameled hardwood. Furnished with smooth bottom only.

No. 814

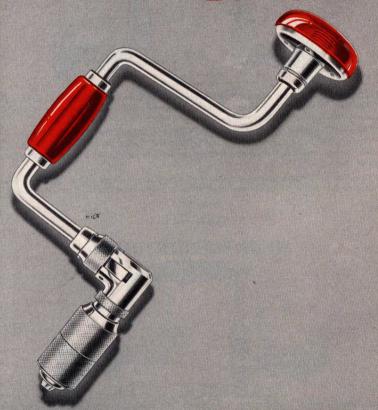
Length

Width Iron

Weight
4 3/8 lbs.

Code ETGOK Price each \$4.30

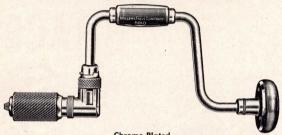
BIT BRACES



MILLERS FALLS
TOOLS



NO. 5010 PARSONS DE LUXE BRACE



Chrome Plated

This beautiful tool, illustrated in color on the preceding page, was designed several years ago by W. J. Parsons, the dean of our designing and engineering staff, in commemoration of his fiftieth anniversary with the Millers Falls Company.

The chuck is full ball bearing with two machined steel jaws that hold 1/8 to 1/2 inch round shank, No. 1 Morse Taper and square bit shank drills and reamers. The full boxed ratchet is controlled by a ring shift. Sweep handle runs on bronze bushings as does the head. Head is also equipped with a ball thrust bearing.

The steel clad head and sweep handle are made of a glossy, transparent red Permaloid, a plastic more durable than wood. All exposed metal parts highly polished and finished in brilliant chrome plate.

No. 5010

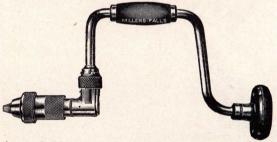
Sweep 10"

Weight 3 1/2 lbs.

Code ANABO \$11.00

Packed one in a box

NOS. 770-772 RATCHET BRACES



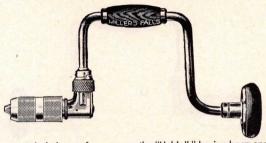
A sturdy, quality brace. Ball bearing at every possible point, every constructional detail refined and the entire tool beautifully finished. Equipped with Lion ball bearing chuck to hold regular square shanks, No. 1 Morse Taper and round shanks from \(\frac{1}{2} \) inch in diameter. Boxed ratchet with ring shift. Full steel clad, ball bearing head. Head and handle finely finished tropical hardwood. Handle has metal inserted rings. All exposed metal parts heavily nickeled and highly buffed.

Sweep Weight Code No. 770 14' 3 1/8 lbs. ABACU \$9.20 No. 771 12" 3 1/2 lbs. ABAFT 8.70 No. 772 10" 3 3/8 lbs. ABAND 8.40

Packed two in a box



NOS. 730-733 RATCHET BRACES



A fine quality brace, popularly known for years as the "Holdall," having been one of the first to be equipped with the universal type or "Master" chuck holding square, No. 1 Morse Taper and plain round shanks from ½ to ½ inch in diameter.

Boxed ratchet mechanism with ring shift. Steel clad, ball bearing head. Handle has inserted metal rings. Head and handle of finely finished tropical hardwood.

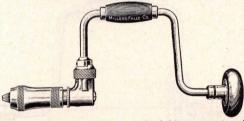
All exposed metal parts nicely polished, nickel plated and buffed.

No. No.

	Sweep	Weight	Code	Price each
. 730	14"	3 1/2 lbs.	ABBEY	\$8.00
. 731	12"	3 1/4 lbs.	ABBOT	7.40
. 732	10"	31/8 lbs.	ABDIC	7.20
. 733	8"	2 3/4 lbs.	ABDOK	7.20

Packed two in a box

NOS. 31-33 RATCHET BRACES



This brace meeting every boring requirement for square shank bits represents a fine value and has probably enjoyed the greatest sale of any quality brace ever produced.

Equipped with Barber chuck with self-opening, forged steel alligator jaws. Steel clad, ball bearing head. Handle has inserted metal rings. Boxed ratchet with ring shift. Head and handle finely finished tropical hardwood.

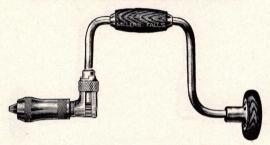
All exposed metal parts nicely polished, nickel plated and buffed.

	Sweep	Weight	Code	Price each
No. 31	12"	3 1/4 lbs.	ABSEN	\$7.20
No. 32	10"	2 1/8 lbs.	ABSOL	7.00
No. 33	8"	2 5/8 lbs.	ABSIK	7.00

Packed two in a box



NOS. 1321-1324 RATCHET BRACES



Similar to Nos. 31 to 33, but with mahogany finished hardwood heads and handles.

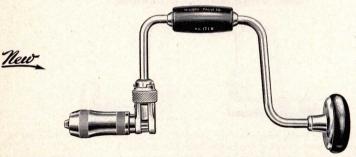
Boxed ratchet mechanism, with ring shift. Barber chuck with self-opening, forged steel alligator jaws. Ball bearing, steel clad head. Handle has inserted metal rings.

All exposed metal parts polished, nickel plated and buffed.

	Sweep	Weight	Code	Price each
No. 1321	12"	3 lbs.	ACRIM	\$6.30
No. 1322	10"	2 3/4 lbs.	ACROB	6.00
No. 1323	8"	2 ½ lbs.	ACTIV	6.00
No. 1324	6"	2 1/4 lbs.	ACTOR	6.00

Packed two in a box

NOS. 1708-1712 RATCHET BRACES

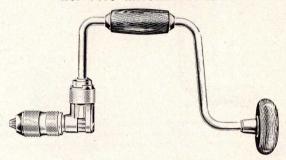


Well built, serviceable braces that can be offered at a moderate price. They are equipped with Barber chuck with alligator jaws and semi-boxed steel ratchet. Knurled shifter ring controls ratchet mechanism. Steel clad, ball bearing head and sweep handles made of hardwood, nicely mahogany lacquered. All exposed metal parts nickel plated.

	Sweep	Weight	Code	Price each
No. 1708	8"	2 1/4 lbs.	AJACK	\$4.00
No. 1710	10"	2 3/8 lbs.	AKLEM	4.00
No. 1712	12"	2 ½ lbs.	ALROX	4.35
		Packed six in a box		



NO. 1410 RATCHET BRACE



serviceable brace that is offered at a popular price. It is equipped with a Barber chuck with ligator jaws and a semi-boxed ratchet mechanism operated by a knurled ring shift. Handles ahogany stained hardwood. All exposed metal parts polished.

Sweep o. 1410

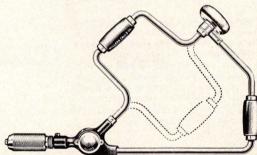
10"

Weight 2 lhs

Code AGLOR Price each \$2.40

Packed one half dozen in a box

NO. 502 CORNER BRACE



great time and labor saver on jobs where there are a lot of holes to be bored in corners, against alls and beams and similar locations. Far more pressure can be put on the bit and more power devered to the chuck than with a ratchet brace on the same work.

Master chuck holds square, No. 1 Morse Taper and round shanks from 1/8 to 1/2 inch in diameter. achine-cut, case-hardened steel gears, fully enclosed. Ball thrust bearing at base of chuck. Ball earing head. Handles have inserted metal rings. Frame black enameled. Head and handles ahogany finished hardwood. Length, 17 inches.

All exposed metal parts, except frame, polished, nickel plated and buffed.

Sween 10"

o. 502

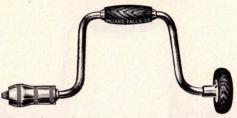
Weight 4 5/8 lbs.

Code AGAPE Price each \$12.00

Packed two in a box



NO. 142 PLAIN BRACE



On many classes of work a ratchet mechanism on a brace is unnecessary'and a plain or sleeve brace fills the requirements. This is a low-priced brace with inexpensive finish. Barber chuck with alligator jaws. Head is screwed securely to the quill. Head and handle mahogany stained hardwood. Exposed metal parts polished.

No. 142

Sweep 10" Weight 1 3/4 lbs. Packed six in a box Code

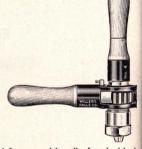
Price each

NO. 4 RATCHET AUGER HANDLE



A heavy duty tool that can be operated by two men when desirable. It has a powerful ratchet mechanism, controlled by a small lever. It can be quickly changed from right- to left-hand ratchet or can be positively locked.

The handle shown at the right, the outer portion of which swivels freely, can be unscrewed from its normal position and screwed into the hex nut at the top of the frame to form a steady handle for use in corners or against walls or other obstructions.



Chuck holds practically all sizes of bit and auger shanks. Metal frame and handle ferrule black enameled. All other exposed metal parts nicely nickel plated.

No. 4

Length 15" Weight
3 lbs.
Packed one in a box

Code CAGES Price each \$6.20

NO. 2 AUGER HANDLE



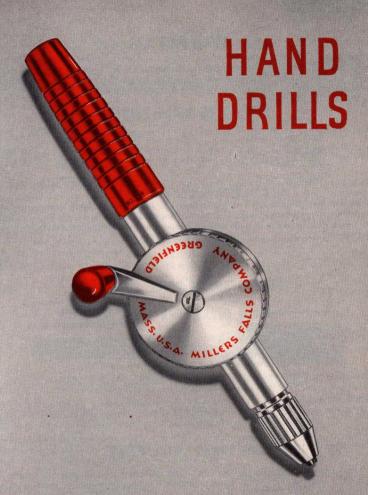
A stout wood handle holding all sizes of bits and all but the largest sizes of ship auger shanks. Augers are held by two 3-inch steel clamps tightened by means of two wing nuts. Handle straight grained, selected ash.

Capacity—Regular Bit Shanks up to 2 inches; Ship Auger Shanks up to 2 inches.

No. 2

Length

Weight 1½ lbs. Packed six in a box Code CAGNE Price each \$1.50



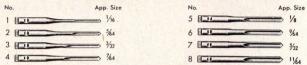




DRILL POINTS

The straight fluted drill points shown below are for use in automatic or hand drills according to the type of shank with which they are fitted. They are made of a fine grade of tool steel, carefully hardened and tempered and well sharpened. They drill nice, clean holes in hard and soft woods soft metals, plaster, bone, wallboard and many other similar materials.

NEW STYLE DRILL POINTS



For Millers Falls and some other Automatic Drills

The shanks of these drill points have a slabbed base that seats very positively in the bottom of the chuck and a recess for a locking mechanism that prevents them from pulling out. They are made of fine tool steel properly hardened and carefully sharpened. Bright finish. Made in eight sizes as indicated above.

	Length	Code		Price
No. 401	2"	DETOR	Per Dozen	\$1.50
No. 401	2"	DETOT	Set of 8	1.10

FLUTED SHANK DRILL POINTS

No.	App. Size	No.	App. Size
1 =	1/16	5	1/8
2 =	5/64	6	%4
3 =	3/32	7	5/32
4 =	764	8	114.

For use in Millers Falls and Goodell-Pratt Automatic Drills

These drill points have fluted shanks for use in the two-jawed chucks of automatic drills. They are made of a fine grade of tool steel properly hardened and carefully sharpened. Made in eight sizes

as indicated above				
	Length	Code		Price
No. 402	2"	ZOTOZ	Per Dozen	\$1.50
No. 402	2"	ZOTPA	Set of 8	1.10

1.10

Set of 8

ROUND SHANK DRILL POINTS

No.	A	pp. Size	No.	App Size
1		1/16	5 =	 1/8
2		5/64	6 =	964
3		3/32	7 =	 5/32
4	<u> </u>	7/64	8 =	11/64

For use in Hand Drill Chucks

These points are identical to those above but with plain round shanks for use in any 1/4-inch threejawed chuck. Made in eight sizes as indicated above.

	Length	Code		Price
No. 403	2"	ZOTUB	Per Dozen	\$0.75
No. 403	2"	ZOTVA	Set of 8	.55
	Parked one doze	en or one set in a metal scree	u sannad plastis wal	COLUMN TO SERVICE STATE OF THE



NO. 185A AUTOMATIC DRILL



A world-famous drill that has been made even finer by the addition of a new style chuck

front portion of the tool is made of hollow brass tubes, on one of which a carefully machined ral is cut. This runs through a spiral cut in the center nut, which is made of a very hard grade of nze

he finely knurled handle is of the magazine type, having individual compartments for the eight ferent size drill points. Each one of these compartments is numbered and below the number is a e or gauge showing the size of hole drilled by the point in that compartment. Drill points are noved or returned by turning the hole in the rotating cap opposite the proper compartment and ping out the point. Only one compartment opens at a time.

he chuck seats the drill points very positively and locks them securely so that they cannot be pulled until the chuck shell is unscrewed.

One set of eight, No. 401 New Style Drill Points, 1/16 to 11/4 inch in diameter, regular equipment.

Price each Code Length Weight \$4.20 YEKIJ 1/2 lb. 185A 10"

188A AUTOMATIC



s tool is built for the home and provides a highly efficient drill at a very reasonable price. Any man, man, or child can use it to bore the many holes needed from time to time; for installing the many dern fixtures that go into every room in the house, and for innumerable other uses.

t drills eight different size holes quickly and with surprising ease in hard and soft wood, soft metals, Ilboard, plaster, etc. The eight drill points are contained in the numbered compartments in the gazine handle. They are safely locked in until wanted.

o remove the desired size drill release the cap lock by slipping down the lock button, turn the hole the cap opposite the proper drill compartment and tip out the drill.

nsert the drill selected in the four-jawed chuck, tighten the chuck nut and the tool is ready to use. ace the drill point where the hole is wanted and simply push down a few times, allowing the handle spring back after each stroke, and there is a good clean hole.

The handle is jet black, molded bakelite with a polished aluminum band just below the rotating cap. e exposed metal parts are beautifully polished and nickel plated. The spiral driving mechanism is ry well made and is practically indestructible with proper lubrication.

One set of eight, No. 402 Fluted Shank Drill Points, 1/16 to 11/64 inch in diameter, regular equipment. Price each Code Weight Length \$3.00 YEKNA 6 ozs. . 188A 95/8"





NO. 100 AUTOMATIC DRILL



The time-tested features and construction that have been been into Millers Falls and Goodell-Pratt automatic drills and he earned their well deserved popularity are found in this beaut new tool.

Its uses are unlimited. It is an essential tool for carpent cabinet makers, model and pattern makers, electricians, ha workshop enthusiasts and home owners. It's the ideal tool drilling lead holes for screws, nails, hooks, etc.

The barrel of the magazine handle is made of unbreaka red plastic and holds eight No. 402 fluted shank drill po 1/16, 3/4, 3/32, 7/64, 1/8, 3/4, 5/32 and 1/64 of an inch in diameter. number and diameter of the point in any compartment is index on the ring above the barrel. The point wanted for use is tained by pulling down the lock and turning the barrel until proper number is directly below the hole in the cap. Tip up drill and the point slips out.

The chuck holds the drill points securely when the chuck she screwed tight.

All exposed metal parts are either nickel plated and buff or highly polished aluminum.

No. 100

Length 91/8"

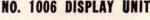
Weight 8 ozs. Code

YENOR

\$3

Packed one in a box





Complete with six No. 100 Drills

A compact, colorful wood display requiring less than one-h square foot of counter space, that really sells the No. 100 Au matic Drill because to see it is to want it. Nicely lacquered of silk screened in red, black, gray and white.

Width, 11 inches, depth, 41/2 inches, height, 91/2 inches.



Weight 5 lbs.

Code YEDAX

\$21

No. 1006

Packed one unit in a carton



NO. 104 HAND DRILL

Single Speed, Enclosed Gears. Capacity 0 to 1/4 inch.

is newest and finest Millers Falls hand drill, of entirely new sign, has already demonstrated its fine performance and pendability. Its beauty and smooth operation insure acceptce by craftsmen generally.

The frame and gear cover are die-cast aluminum. The steel indle runs in an "Oilite" bushing against a thrust bearing. The el pinion and machine-cut cast drive gear are entirely ensed.

The handles are made of practically unbreakable, glossy red astic, far more durable than wood. The screw cap end handle is llow and is long enough to hold standard twist drills up to inch.

The chuck, of new design, has three hardened jaws holding to 1/4 inch drills.

One set of eight, No. 403 Drill Points, 1/16 to 11/4 inch diameter e regular equipment and are packed in the hollow end handle.

Frame and gear cover gray enamel, chuck nickel plated, ndles glossy red plastic.

. 104

. 1044

Capacity

Length 125/8"

Weight 1 5/8 lbs. Packed one in a box

Code WYDAM

Price each \$5.00

New

NO. 1044 DISPLAY UNIT

Complete with four No. 104 Hand Drills

is substantial wood display, lacquered and silk screened in ee colors, is supplied entirely free with initial orders for only ur No. 104 Hand Drills. Designed for counter use it requires ly one-half square foot of space. This display brings this fine w drill to the attention of customers; makes it easy for them to ndle and sells on sight.

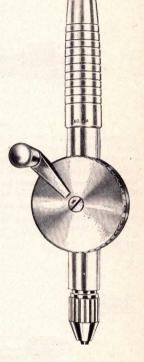
Width, 11 inches, depth, 5 inches, height, 13 inches.

Weight 10 lbs.

WYGET

Price \$20.00

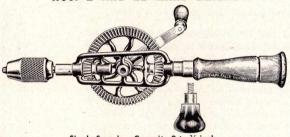
Packed one unit in a carton







NOS. 2 AND 2B HAND DRILLS



Single Speed Capacity O to 3/8 inch

A strong, serviceable tool built on a sturdy cast frame. Three-jawed chuck with protected spring holds 0 to 3/8 inch round shanks. Gear ratio 41/2 to 1. Spindle equipped with ball thrust bearing Two steel pinions, one drive and one idling equalizer.

Frame nicely black enameled. Large gear red enameled with nickeled rim.

Exposed metal parts nickel plated and buffed. Tropical hardwood end handle with screw car Eight drill points, 1/16 to 11/16 inch in diameter, regular equipment.

No. 2B is exactly the same as No. 2 but with solid mahagany finished hardwood end handle an without drill points.

No. 2 No. 2B Capacity 3/8" 3/8"

Length 141/2 15

Weight 21/2 lbs. 25/8 lbs.

Code DAGER DAGOT \$6.5 5.5

Packed one in a box

NO. 308 HAND DRILL





Single Speed

Enclosed Gears

Capacity O to 3/8 inch



Detail showing cast iron drive gear with machine cut teeth solidly anchored to gear cover.

The fine lines and finish of this new 3/8 inch drill are the same as No. 104 illustrated in color on page 25.

The frame and gear cover are die-cast aluminum with a gray ename finish baked on. The steel spindle runs in an "Oilite" bushing against a thrust bearing. The steel pinion and the machine-cut cast drive gear are entirely enclosed. Handles are made of practically unbreakable, glossy red plastic, far more durable than wood. End handle is hollow with screw cap for holding standard twist drills.

The nicely nickeled chuck has three hardened jaws that hold 0 to 3/8 inch round shank drills.

No. 308

Capacity 3/8"

13 1/8"

Weight 2 1/8 lbs. Packed one in a box

Code WYFOT Price en \$6.20



NO. 5 HAND DRILL



Capacity O to 1/4 inch Single Speed

is drill is equipped with a wide rim on the large drive gear and can be easily grasped by the umb and fingers to start small drills on delicate work. This gear is red enameled and the rim nicely olished and nickeled. The frame is black enameled. The drive and equalizing pinions are steel, ckel plated. All gears are machine cut.

The three-jawed chuck which holds 0 to 1/4 inch round shank drills is nicely nickel plated. One set eight, No. 403 Drill Points, 1/6 to 11/4 inch in diameter regular equipment; they are packed in the ollow screw cap handle which is made of fine tropical hardwood. Handle ferrules bright nickeled.

> Capacity 1/4"

0. 5

o. 77 A

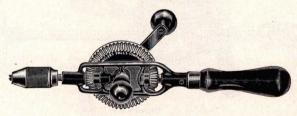
12 1/8"

1 5/8 lbs.

Code DANGL Price each \$6.00

Packed one in a box

NO. 77A HAND DRILL



Single Speed Capacity O to 1/4 inch

smooth operating drill that sells for a very moderate price. The frame is a smooth, black enameled e casting. The drive and equalizing pinions are steel, nickel plated. The solid large gear is red nameled. All gears are machine cut.

The nickel plated chuck holds 0 to 1/4 inch round shank drills. Handles mahogany finished hardwood.

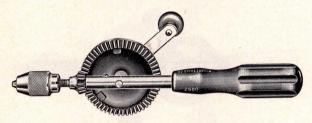
Capacity 1/4"

Length 121/2" Weight 1 5/8 lbs.

Code DETIG Price each \$3.00



NO. 2500B HAND DRILL



Single Speed Capacity 0 to 1/4 inch

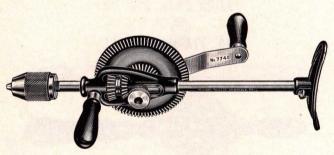
A popularly priced solid steel frame drill with a lot of dependable service built into it. Large gea is cast and finished in red enamel; the pinion is steel. Both gears have machine cut teeth. The three jawed chuck holds 0 to 1/4 inch round shank drills. Crank and end handles mahogany finished hardwood

jawed chuck holds 0 to 1/4 inch round shank drills. Crank and end handles mahogany finished hardwood

Capacity
Length
Weight
Code
Price ead
No. 2500B
1/4"
10%"
1 1/4 lbs.
DASUR
\$2.00

Packed one in a box

NO. 7740 BREAST DRILL



Two-Speed Capacity 0 to 1/2 inch

A sturdy, dependable drill offered at a very moderate price. The black enameled frame and breast-plate are fastened together by a solid polished steel shank. The red enameled large gear can be easily shifted to two positions in the frame—one for high and one for low speed operation. Two separate steel pinions. All gears machine cut. All-steel chuck has three hardened jaws that hold 0 to ½ inch round shank drills. Handles mahogany finished hardwood.

No. 7740

Capacity

Length

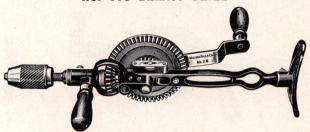
Weight

Code

Price each \$5.00



NO. 118 BREAST DRILL



Capacity O to 1/2 inch Two-Speed Level

sturdy, two-speed drill built on a black enameled frame equipped with a well-protected spirit vel. Black enameled breastplate. Large gear red enameled with polished, nickeled and buffed dge and rim. Nickeled steel pinion. Gear ratios 3 to 1 and 1 to 1. Nickeled extensible crank. djustable ball bearing spindle. Nickeled three-jawed chuck with protected springs holds 0 to ½ inch und shanks. Idler roll to equalize large gear bearing. Side and crank handles mahogany finished rdwood.

All exposed metal parts nickel plated.

. 118

Capacity 1/2"

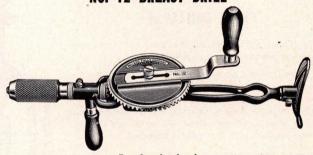
171/2"

Weight 6 1/2 lbs.

Code DECAD Price each \$9.50

Packed one in a box

NO. 12 BREAST DRILL



Two-Speed Level Capacity 1/8 to 1/2 inch round, Bit and No. 1 M. T. Shanks

ame sterling construction as No. 118 above, but equipped with a Master chuck holding round shank rills, 1/8 to 1/2 inch in diameter, bit shanks and No. 1 Morse Taper Shanks.

Capacity 0. 12 Universal

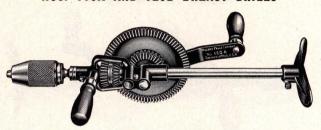
Length 171/2"

Weight 61/2 lbs.

Code DEBUT Price each \$8.50



NOS. 119A AND 120B BREAST DRILLS



Two-Speed Two Steel Pinions

These fine values in the medium priced field are built on strong black enameled frames. The breastplat is connected to the frame by a solid polished steel shank. Two speeds with ratios of 3 to 1 and 1 to Large gear finished in red enamel. Ball thrust bearing on spindle. Side and crank handles mahogan finished hardwood. All exposed metal parts nicely polished.

No. 119A is equipped with a two-jawed chuck that holds 1/8 to 1/2 inch round and No. 1 Morse Tape

chuck with protected springs holding 0 to ½ inch round shank drills.						
	Capacity	Length	Weight	Code	Price ed	
No. 119A	Universal	181/4"	5 lbs.	YEAWS	\$6.5	
No. 120B	1/2"	161/2"	4 5/8 lbs.	DARED	6.5	

Packed one in a box

CHAIN DRILLS

An auxiliary tool for use with a breast drill or bit brace when extra power is needed, or where pressure cannot be easily applied.

The drill is automatically fed into the work by an adjustable friction feed which is automatically regulated by the resistance the drill encounters. Drill breakage is, therefore, reduced to a minimum. Requires but a moment to adjust the chain. Reverse movement of brace withdraws drill. No intricate parts to get out of order. Hand feed can be used if desired. Four feet of stout chain with each drill. No. 719 illustrated.

	Capacity	Weight	Code	Price each
No. 718	1/8 to 1/2", No. 1 M. T. and Bit Shanks	4 1/2 lbs.	DECUR	\$8.00
No. 719	0 to 1/2" Round Shanks	4 1/2 lbs.	DECLP	8.50

Packed one in a box



LEVELS

MILLERS FALLS
TOOLS

SINCE
[868]



NO. 629 LINE LEVEL



A featherweight model with a cat's-eye vial set in a hexagonal aluminum tube. The hooks and guards are so designed that it snaps on to a level line very easily but cannot be jumped off.

Each level packed in a permanent container of transparent celluloid with a screw cap.

No. 629

Length 3"

Weight 1/2 oz.

Code ZABLO

\$0.60

Packed six in a box



DIE-CAST ALUMINUM LEVELS



Two level and four plumb vials

The frames of these fine new levels are made of smooth aluminum die castings. They are designed for maximum strength and rigidity. The two working faces are precisely ground to exact parallelism and nicely finished on four sides and ends. The body is attractively finished in gray and red enamel.

Excellent visibility and luminosity are provided by the large white vial wells in which the high quality vials are accurately and permanently set. They are well protected by glasses on both sides sealed to prevent fogging or breakage.

Dimensions	Weight	Code	Price each
18 x 2 1/4 x 1"	1 1/8 lbs.	PENAN	\$5.50
24 x 21/4 x 1"	2 1/4 lbs.	PENEC	6.30
28 x 21/4 x 1"	21/2 lbs.	PENIT	6.80
30 x 2 1/4 x 1"	2 5/8 lbs.	PENOL	7.20
The same of the sa	18 x 2 ¼ x 1" 24 x 2 ¼ x 1" 28 x 2 ¼ x 1"	18 x 2 ¼ x 1" 1 ½ lbs. 24 x 2 ¼ x 1" 2 ¼ lbs. 28 x 2 ¼ x 1" 2 ½ lbs.	18 x 2 ¼ x 1" 1 ½ lbs. PENAN 24 x 2 ¼ x 1" 2 ¼ lbs. PENEC 28 x 2 ¼ x 1" 2 ½ lbs. PENIT

Packed one in a box

ALUMINUM MASONS' LEVEL



Two level and four plumb vials

This new level is made from an aluminum casting designed for maximum strength and rigidity without undue weight. Working faces precisely ground to parallelism. Sides polished and the body finished in gray enamel. Large white vial wells protected with sealed glasses. Six high quality vials.

Dimensions No. 1042

42 x 21/4 x 11/8"

Weight 3 1/4 lbs.

Code PEBYK Price anch \$12.00



WOOD LEVELS

e levels shown on this and the following page are made from the finest straight grain white pine ocurable. The billets are thoroughly air seasoned and kiln dried and are filled and finished with care make them as permanently moisture proof as possible and to maintain their accuracy.

None but high quality, accurately curved vials are used. They are precisely and permanently set d will remain that way unless abused. They are set in white wells for luminosity and protected by asses on both sides and sealed in with putty.

NOS. 124 AND 130 WOOD LEVELS



Two level and two plumb vials

ade from a plain piece of straight grained white pine, thoroughly seasoned and kiln dried. Filled and finished with weather-proofing red lacquer. White, glass protected and sealed vial wells. Two and grips on either side.

	Dimensions	Weight	Code	Price each
. 124	24 x 2 ½ x 1 ¼"	1 ½ lbs.	PEFAM	\$3.50
. 130	30 x 21/2 x 1 1/4"	1 ½ lbs.	PEFUX	3.80

Packed one in a box

NOS. 312 AND 330 WOOD LEVELS



One level and one plumb vial

ame fine quality level as above but with only one level and one plumb vial but with a glass protected nd sealed top view opening above the level vial. One hand grip on either side.

Dimensions	Weight	Code	Price each
12 x 21/2 x 11/4"	1 lb.	PEGAM	\$2.50
18 x 2½ x 1¼"	1 lb.	PEGIS	2.80
24 x 21/2 x 11/4"	1 ½ lbs.	PEGMY	3.20
28 x 21/2 x 11/4"	1 ½ lbs.	PEGUN	3.40
30 x 21/2 x 11/4"	1 ½ lbs.	PEGYT	3.50
	18 x 2½ x 1¼" 24 x 2½ x 1¼" 28 x 2½ x 1¼"	12 x 2 ½ x 1 ¼" 1 lb. 18 x 2 ½ x 1 ¼" 1 lb. 24 x 2 ½ x 1 ¼" 1 ½ lbs. 28 x 2 ½ x 1 ¼" 1½ lbs.	12 x 2 ½ x 1 ¼" 1 lb. PEGAM 18 x 2 ½ x 1 ¼" 1 lb. PEGIS 24 x 2 ½ x 1 ¼" 1 ½ lbs. PEGMY 28 x 2 ½ x 1 ¼" 1½ lbs. PEGUN



NO. 948 MASONS' LEVEL



Full Brass Binding Two level and four plumb vials

Made of straight grained, selected white pine thoroughly seasoned and kiln dried. Full brass binding on four edges and brass plates on the ends. Two level and four plumb vials accurately and permonently set in the three oval wells protected and sealed in by glass. Fine red finish makes it as permonently moisture proof and non-fogging as possible. Two hand grips on either side.

No. 948

Dimensions
48 x 2 ½ x 1 ¼ "

Weight 3 1/2 lbs.

Code PEJJO Price ed \$10.5

Packed one in a box

NO. 848 MASONS' LEVEL



Brass Ends Two level and four plumb vials

The same fine levels as above with brass end plates but without the brass binding. Two level and four plumb vials.

No. 848

Dimensions 48 x 2 ½ x 1 ¼ " Weight 2 1/2 lbs.

Code PEKAC Price each

Packed one in a box

NO. 448 MASONS' LEVEL



One level and two plumb vials

Similar to the levels above but with only one level and two plumb vials which are set in round glass protected and sealed wells. Red weatherproof finish.

No. 448

Dimensions 48 x 2 ½ x 1 ¼ " Weight 2 1/2 lbs.

Code PEMAK Price each \$5.00



NO. 590 TORPEDO LEVEL



One level, one 45° and one plumb vial

beautiful level, unique in the materials used and its wider range of usefulness.

The body is moulded, glossy black bakelite, an ideal material for the purpose due to its great strength; pervious to moisture and the fact that it is affected less by temperature changes than either wood metal.

The top plate is a heavy piece of polished "nickeloid" which sets flush with the body and gives apple protection to the level glass.

Two plumb, one 45° and one 90°, and one level vial are provided, all of the cat's-eye type, which fords better visibility in poorly illuminated places.

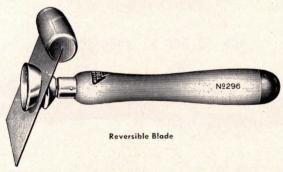
. 590

9 x 1 1/4 x 3/4"

Weight 5 ozs.

Code YUOMO Price each

NO. 296 FLOOR SCRAPER



nis new scraper has a very quick, positive adjustment of the blade. It is equipped with a practical all joint that permits setting the blade at a wide range of angles and pitches by simply loosening and tightening the handle.

The blade, which is reversible so all four edges can be used, is made of finest quality tool steel, $x \frac{41}{2}$ inches, hardened and tempered to hold the ideal scraping edge.

A large, well shaped blade handle is provided to which ample pressure can be applied without iscomfort. Both handles are turned from selected hardwood and have a fine natural lacquer finish with green tips.

o. 296
o. 376 Extra Blades

Width

3"

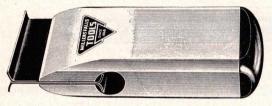
Length 9 1/8" Weight 3/4 lb.

YICOM YOCAJ \$1.50 .30

Packed one in a box



NOS. 34 AND 35 WOOD SCRAPERS





Price each

Four Scraping Edges

The four fine tool steel scraping edges with which these scrapers are equipped make them an outstanding scraper value. Two edges are always in position ready for use and two more are available by simply reversing the scraper iron. No other scraper offers such value.

Blades fine tool steel carefully hardened and tempered and then ground and honed to a fine scraping edge.

Handles are of selected hardwood nicely finished in natural lacquer with a green tip.

	Width Blade	Length	Weight	Code
No. 34	21/2"	5"	6 ozs.	YOOLU
No. 35	1 1/2"	5"	4 ozs.	YOOMA
No. 346	Extra Blades for No. 34			YOONY
No. 356	Extra Blades for No. 35			YOOPI

Packed six in a box

NOS. 39 AND 51 WOOD SCRAPERS



Four Scraping Edges

The paint brush type handle with which these scrapers are equipped greatly facilitates any scraping operation as it provides ample room to apply pressure and a sure comfortable grip in exerting the necessary pull.

They are equipped with new improved blades that give a finer surface with less effort. Each blade has four scraping edges. Two are always ready for use and the other two quickly available by simply reversing the blade in the handle.

The selected hardwood handles are nicely finished in clear lacquer with a green tip.

				2	
	Width of Blade	Length	Weight	Code	Price each
No. 39	21/2"	8 3/4 "	6 ozs.	YADAT	\$0.70
No. 51	11/2"	71/2"	4 ozs.	YAFVA	.50
No. 346	Extra Blades for No. 39			YOONY	.40
No. 356	Extra Blades for No. 51			YOOPI	.25
		Parked six	in a box		

SCREW DRIVERS







NO. 29 AUTOMATIC SPIRAL RATCHET SCREW DRIVER

With Automatic, Quick Return

A new, automatic spiral screw driver particularly suited to the requirements of th hobbyist and householder. It is a high grade tool in every detail, sturdily built and nicely finished.

It drives or draws medium size screws smoothly, easily and with surprising rapidity The spiral is just as carefully machined as on our larger sizes. The ratchet mechanism is entirely new and dependable. Action is controlled by simply turning the knurled shifter sleeve right or left as indicated on the stamped band. When set at 0, ratche mechanism is locked.

One bright finish forged steel bit 1/4 inch wide is regular equipment. The chuck and chuck sleeve, shifter sleeve and screw in handle end are nicely nickeled and buffed The handle is made of hardwood with a nice mahagany lacquer finish.

Length Extended with Bit No. 29 101/4"

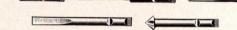
Weight 5/8 lb.

GAKON

\$2.50

Packed one in a box

EXTRA TOOLS



The drills, countersink and slim cabinet type screw driver bit listed below greatly increase the usefulness of the No. 29 screw driver. They are all made with shanks that fit the chuck. No. 329 Set of Points consist of one each 1/16, 1/84 and 1/32 inch diameter.

		Size	Code	Price
No. 297	Cabinet Bit	5/32 "	GEBAC	Doz. \$1.70
No. 298	Countersink	3/8"	GEBAN	Doz. 4.00
No. 329	Set of Points	1/16" 5/64" - 3/92"	GEBED	Set .60
No. 3291	Drill Point	1/16"	GEBIF	Doz. 2.00
No. 3292	Drill Point	5/64"	GEBIR	Doz. 2.00
No. 3293	Drill Point	3/32 "	GEBOM	Doz. 2.00

Cabinet Bit and Countersinks packed 1/4 doz. in an envelope Drill Points packed 1/2 doz. or one set in a screw top vial





NO. 294 DISPLAY UNIT

The attractive display for the No. 29 screw driver and its attachments made of wood, lacquered and silk screened in three colors, is free with only four screw drivers.

Weight 3 3/4 lbs. Code

GIBBO \$11.08

No. 294 Display Unit

Complete with 4 No. 29 Screw Drivers and 1 each Nos. 329 Set of Points, 297 Screw Driver Bit, 298 Countersink and Display

Packed one unit in a carton



SPIRAL RATCHET SCREW DRIVERS



omatically drives or draws screws, acts as a left- or right-hand ratchet or as a rigid screw driver. se actions are all controlled by a simple shifting of the knurled control sleeve and the spiral lock nut.

he spiral is a solid rod of fine quality steel, precisely machined, running in two manganese bronze ral nuts controlled by hardened tool steel ratchet pawls. Greatly increased life has been secured nearly doubling the length of the spiral nuts.

hree sizes of special analysis steel blades, individually tested, are furnished as regular equipment.

The grame of the standard of the shall of the quick acting chuck, inserting the shank and the shall of the shall of the shall of the shall of the shall.

Il exposed metal parts finely polished, nickeled and buffed. Mahogany finished hardwood handle.

	Length Extended with Bit Inserted	Length Closed with Bit Inserted	Weight .	Code	Price each
67A	12 5/8"	9 3/8"	5/8 lb.	GAILY	\$4.30 4.90
61A 62A	19 ½" 25 ½"	16 1/8"	1 % lbs.	GABEL	6.40



With Automatic, Quick Return

same design and action as above, with the addition of a spring in the handle which automatically turns the handle for the next stroke. Makes one hand operation easy.

	Length Extended with Bit Inserted	Length Closed with Bit Inserted	Weight	Code	Price each
. 670A	13 1/8"	8 1/8"	3/4 lb.	GALEA	\$4.90
. 610A	201/2"	15"	1 ½ lbs.	GALIO	5.60
420A	27"	18 1/8"	2 3/8 lbs.	GALOP	7.30

Packed one in a box

For extra Phillips and Standard Bits and Drill Attachments see page 46.

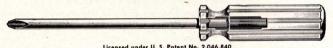


PERMALOID HANDLE SCREW DRIVERS

These handsome screw drivers are even more durable and efficient than they are beautiful. The handles are made of transparent bright red Permaloid, an unbreakable, cellulose acetate butyrate a very slow burning material of high dielectric strength ideal for a screw driver in every way. They are ribbed to give a positive grip and the lengths and diameters are ample for efficient, comfortable use

The blades are made of a fine grade of steel, heat-treated their entire length for extreme toughness the bits are cross ground, nicely finished. Each individual blade is torque tested.

NO. 850 PHILLIPS SCREW DRIVER



These drivers are designed to handle the Phillips recessed head screw which is gaining rapidly i popularity. The blades are machined within very close limits to fit the screws perfectly. Blades nicel polished. Unbreakable, transparent red Permaloid handles of high dielectric strength and very slow burning.

	Phillips	Screw Size	Length Blade	Diameter Shank	Weight Box	Code	Price eac
No. 850	No. 1	0 to 4	3"	%4"	1/2 lb.	ZENAX	\$0.9
No. 850	No. 2	5 to 9	4"	1/4"	1 1/4 lbs.	ZENFO	1.0
No. 850	No. 3	10 to 16	6"	5/16"	2 lbs.	ZENKA	1.3
No. 850	No. 4	18 to 24	8"	3/8"	3 1/2 lbs.	ZENRO	1.70

NO. 851 STANDARD SCREW DRIVER



Cross ground, standard type, round shank blades with nickeled and burnished finish. Unbreakable transparent red Permaloid handles of high dielectric strength and very slow burning.

Length Blade	Diameter Shank	Weight Box	Code	Price de
4"	9/32 "	1 ½ lbs.	ZEODY	\$ 9.0
6"		2 lbs.	ZEOFA	12.6
8"	3/8"	3 1/4 lbs.	ZEOHE	15.
10"	3/8"	4 1/2 lbs.	ZEOIT	17.
12"	3/8"	5 lbs.	ZEOJA	19.
	4" 6" 8" 10"	4"	4"	4" ½2" 1½ lbs. ZEODY 6" ¾6" 2 lbs. ZEOFA 8" ¾4" 3½ lbs. ZEOHE 10" ¾8" 4½ lbs. ZEOHE

NO. 852 HEAVY DUTY SCREW DRIVER



Bits forged on the diagonal from fine quality square stock. Cross ground. Nickeled and burnished Unbreakable, transparent red Permaloid handles of high dielectric strength and very slow burning.

	Length Blade	Size Shank	Weight Box	Code	Price do
No. 852	4"	1/4 x 1/4"	1 1/4 lbs.	ZEOJT	\$10.6
No. 852	6"	5/16 x 5/16"	2 1/4 lbs.	ZEOKA	13.2
No. 852	8"	3/8 x 3/8"	3 3/4 lbs.	ZEOKM	16.4
No. 852	10"	3/8 x 3/8"	4 1/4 lbs.	ZEOKO	19.60
No. 852	12"	3/8 x 3/8"	5 lbs.	ZEOKR	22.40
		Packed s	ix in a box		



NO. 853 CABINET SCREW DRIVER



des hammer-forged from high grade ¾ inch round stock and tempered entire length. Cross ground, nished nickel finish. Unbreakable, transparent red Permaloid handles of high dielectric strength d very slow burning.

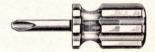
	Length Blade	Diameter Blade	Weight Box	Code	Price doz.
853	3"	3/16"	3/4 lb.	ZEOKS	\$ 8.00
853	-6"	3/16"	7/8 lb.	ZEOLA	8.50
853	8"	3/16"	1 lb.	ZEOLD	9.00
853	10"	3/16"	11/8 lbs.	ZEOLE	10.00

STUBBY SCREW DRIVERS





855



rdy, well made tools for use in close quarters or to carry in the pocket. Blades are $1\frac{1}{2}$ inches long, ged from high grade $\frac{6}{12}$ inch square stock. The unbreakable, transparent red Permaloid handles of high dielectric strength and very slow burning.

	Size Blade	Length Blade	Weight Box	Code	Price
854	5/16" Standard	11/2"	7/8 lb.	ZEOMU	\$6.40 doz.
860	No. 1 Phillips	1 1/2"	1/2 lb.	ZERAB	.80 each
860	No. 2 Phillips	1 1/2"	7/8 lb.	ZEREM	.90 each
860	No. 3 Phillips	1 1/2"	1 lb.	ZERLO	1.00 each

NO. 855 VEST POCKET SCREW DRIVER



pencil clip with which this little screw driver is equipped makes it ideal for the vest pocket. The teled blade is made of ½ inch round stock, just right size to handle innumerable screws too small the ordinary driver. The handle is unbreakable, transparent red Permaloid of high dielectric and handle is unbreakable, transparent red Permaloid of high dielectric and handle is unbreakable.

Length Blade Diameter Blade Weight Box Code Price doz. 2" 1/4" 1/4 lb. ZEORA \$3.00

Packed six in a box



RATCHET SCREW DRIVERS



The smooth, sturdy ratchet mechanism built into this well-known tool has been thoroughly time tested. It is controlled by turning the knurled shifter sleeve to any one of three positions giving right- or left-hand ratchet or positive action, as desired.

The blade is forged from high quality screw driver steel. Ratchet housing is steel with hardened tool steel ratchet pawls and spring steel springs.

Exposed metal parts polished and nickel plated. Handle mahogany lacquered hardwood.

	Length Blade	Weight Box	Code	Price each
No. 63	3"	1 3/4 lbs.	GANIL	\$1.20
No. 63	4"	1 1/8 lbs.	GAPER	1.30
No. 63	6"	3 1/4 lbs.	GARTH	1.60
No. 63	8"	3 5/8 lbs.	GARUM	1.80

Packed six in a box



Particularly adapted for radio, electrical and cabinet work where small screws are used. The cabinet type blade can be spun by merely turning the knurled collar at the base of the blade between thumb and fore finger. The same dependable ratchet mechanism is used as in the No. 63 above, gives right-and left-hand ratchet and rigid actions.

Blade nicely polished, other metal parts polished and nickel plated. Handle mahogany lacquered

narawooa.				
	Length Blade	Weight Box	Code	Price each
No. 55	2"	1 lb.	GATCH	\$1.15
No. 55	3"	1 lb.	GATER	1.20
No. 55	4"	1 1/8 lbs.	GATHA	1.20
No. 55	6"	1 1/4 lbs.	GAUDY	1.30

Packed six in a box



Exactly the same mechanism as the heavy sizes of No. 63, with a short, stocky blade and handle for use by gunsmiths, locksmiths, electricians, mechanics and others who need a heavy duty ratched driver. Three actions: right- and left-hand ratchet and rigid.

Exposed metal parts polished and nickel plated. Handle mahogany lacquered hardwood.

Length Blade Length Overall Weight Box Code

No. 59 1 1/4" 6 1/4" 2 1/2 lbs. GAWBY

Packed six in a box

Price each

\$1.70



NO. 676 STEEL HEAD SCREW DRIVER



Torque Tested Blades

extra fine quality screw driver with a steel head set into the end of the handle and everlastingly ted directly to the shank of the blade. The more hammering on the head, the tighter this lock omes.

ne blades are hammer-forged from a fine quality of tool steel selected for its remarkable toughness in properly heat-treated. The shanks have long, wide wings forged on them that preclude any nice of turning in the handle. The handles, of excellent shape and fluted to give a good grip, are de of selected hardwood with a fine mahogany lacquer finish. The handle is protected by a heavy all ferrule pinned through the blade.

he blades are highly polished and the steel head and ferrule nickel plated.

	Length Blade	Diameter Blade	Weight Box	Code	Price doz.
676	3"	7/32 "	1 1/4 lbs.	ZAJUZ	\$ 6.80
676	4"	9/32 "	1 3/4 lbs.	ZAJVE	7.40
676	5"	5/16"	2 1/2 lbs.	ZAJYO	7.80
676	6"	5/16"	2 5/8 lbs.	ZAKAV	8.00
676	8"	3/8"	4 lbs.	ZAKIX	10.80
676	10"	3/8"	4 1/2 lbs.	ZAKOZ	12.20
676	12"	3/8"	5 lbs.	ZAKUB	14.40

Packed six in a box

NO. 909 SCREW DRIVER



Torque Tested Blades

same fine screw driver described above but without the steel head. No finer general purpose w driver can be made.

inely polished tool steel blade. Pinned nickel plated ferrule and mahogany lacquered hardwood idle.

	Length Blade	Diameter Blade	Weight Box	Code	Price doz.
909	2"	7/32 "	3/4 lb.	ZIASP	\$ 5.50
909	3"	7/32 "	7/8 lb.	ZIAWS	5.50
909	4"	9/32 "	1 3/8 lbs.	ZIAXT	6.00
909	5"	5/16"	1 7/8 lbs.	ZIBBO	6.20
909	6"	5/16"	2 lbs.	ZIBIZ	6.50
909	8"	3/8"	3 1/4 lbs.	ZIBUC	9.20
909	10"	3/8"	3 3/4 lbs.	ZIBWA	9.60
909	12"	3/8"	4 1/8 lbs.	ZIBYE	11.50
909	18"	3/8"	5 1/2 lbs.	ZICEZ	18.00

Packed six in a box



NO. 7777 SCREW DRIVER



Torque Tested Blades

A sturdy, serviceable screw driver made in the five most saleable lengths. Blades are hammer-forged from specially tough steel, hardened and tempered their entire length. Forged lugs on shank prevent turning in handle. Blades and ferrules nickel plated and burnished. Hardwood handle finished in black lacquer with red end. Fluted for sure grip.

	Length Blade	Diameter Shank	Weight Box	Code	Price dos
No. 7777	3"	7/32 "	1 3/4 lbs.	GICAB	\$2.60
No. 7777	4"	9/32 "	2 1/2 lbs.	GIDED	2.90
No. 7777	5"	5/16"	3 3/4 lbs.	GIFFO	3.4
No. 7777	6"	5/16"	3 1/8 lbs.	GIGLA	3.4
No. 7777	8"	3/8"	6 1/4 lbs.	GIHUN	4.8

NO. 355 CABINET SCREW DRIVER



Torque Tested Blades

Manufactured from the best materials obtainable for the purpose and finished in keeping. The blades are hammer-forged from a high grade tool steel, carefully hardened and oil tempered and nicely polished. The handles are made of hardwood, fluted to give a good grip and nicely finished in mahogany lacquer. Handles are protected by heavy steel ferrules, securely pinned on.

	Length Blade	Diameter Blade	Weight Box	Code	Price do:
No. 355	2 1/2"	7/32 "	7/8 lb.	YIWAY	\$4.8
No. 355	3 1/2"	7/32 "	7/8 lb.	YIWEZ	5.0
No. 355	4 1/2"	7/32 "	1 lb.	YIWIB	5.2
No. 355	51/2"	7/32 "	1 lb.	YIWOC	5.6
No. 355	61/2"	7/32 "	1 1/8 lbs.	YIWUD	6.0
No. 355	8 1/2"	7/32 "	1 1/4 lbs	YIZAB	7.6
		Packed	six in a box		

NO. 331 JEWELERS' SCREW DRIVER



A slim, light screw driver of the best quality suitable for the most delicate work. The blades are hammer forged from the best quality tool steel, carefully hardened and tempered.

The handles are hardwood with a fine mahogany lacquer finish. They are protected with a nickel plated steel ferrule.

platea steel	terrule.				
	Length Blade	Diameter Blade	Weight Box	Code	Price doz.
No. 331	2"	9/64"	3/8 lb.	YINPA	\$3.85
No. 331	3"	%4"	3/8 lb.	YINSO	4.10
No. 331	4"	9/64"	1/2 lb.	YINUT	4.40
No. 331	5"	%4"	1/2 lb.	YINYV	4.85
No. 331	6"	9/64"	5/8 lb.	YIOCH	5.30
No. 331	8"	9/64"	3/4 lb.	YIOFK	6.40

Packed six in a box



NO. 69 STUBBY SCREW DRIVER



tool small enough to be unnoticed in the side pocket and still fits the palm of the hand so snugly nd with such a positive grip that screws out of all proportion to its size are driven or drawn with ease. n invaluable tool for general repair work, machine adjustments, appliance repairs, and all work close quarters.

The finely polished tool steel blade, 11/2 inches long, is set in a fluted hardwood handle finished in atural lacquer and protected with a heavy steel ferrule.

0. 69

Length Blade 11/2"

Overall 41/5'

Weight Box 14 ozs.

Code YALKA Price each \$0.30

Packed six in a box

NO. 199 OFFSET SCREW DRIVER



is unique driver is equipped with four blades, two at either end set at right angles to each other nd the pair at one end set at 45° from the pair at the other. This provides a blade position for ght positions of the screw slot, making it possible to handle screws otherwise inaccessible. Provides ower for starting or setting large screws.

Blades are machined from fine quality manganese tool steel, hardened and tempered for maximum ughness. Nicely finished.

0. 199

Length 5 1/4"

Weight Box 1 1/8 lbs. Packed six in a box

Code YELOW Price each \$0.50

NO. 797 OFFSET SCREW DRIVER



wonderful tool for reaching out-of-the-way screws, starting frozen ones, or wherever a lot of power necessary. Forged from a fine grade of octagon steel, carefully hardened and tempered, with the ts nicely polished. Blades are set at right angles to one another, and on opposite sides of the handle. ade in two sizes, 41/4 and 61/4 inches.

0. 797 0. 797 Length 4 1/4" 61/4"

1/4"

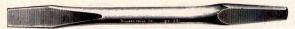
Weight Box 1 1/4 lbs. 3 lbs.

Code ZEGMO ZEGNA

Price doz. \$3.15 6.00



SCREW DRIVER BITS



An unexcelled line, hammer-forged from the best quality of steel procurable for the purpose. Carefully hardened, tempered and nicely polished.

Points carefully formed and accurately finished to fit the slots of the size screws for which they are intended. Shanks well finished to fit securely in two-jawed or bit brace chucks. Length, 5 inches overall.

	Size	Size Screws	Weight Box	Code	Price doz
No. 351	4/16"	6 to 8	1/2 lb.	YIVOB	\$4.00
No. 351	5/16"	8 to 12	1/2 lb.	YIVUC	4.00
No. 351	6/16"	12 to 16	3/4 lb.	YIVWA	5.20
No. 351	7/16"	16 to 20	7/8 lb.	YUHTE	5.20
No. 351	8/16"	20 to 24	7/8 lb.	YUHUX	5.20
No. 351	Asst. 1/4-3/8"	6 to 16	5/8 lb.	YUNIC	4.40

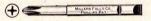
Packed six in a box

BITS FOR SPIRAL RATCHET SCREW DRIVERS

For Standard Slotted Screws

								P	rice
Fitting	Width	No.	Width	No.	Width	No.	Weight Doz.	Set	Doz.
Nos. 67-670	5/32"	1516	3/16"	1515	7/32 "	1514	3/4 lb.	\$0.90	\$3.60
Nos. 61-610	3/16"	1201	7/32 "	1202	1/4"	1203	7/8 lb.	.90	3.60
Nos. 62-620	1/4"	1166	9/32 "	1168	5/16"	1167	1 lb.	.90	3.60

For Phillips Recessed Head Screws



Licensed under U. S. Patent No. 2,046,840

No.	Fitting	Phillips Size	Weight Doz.	Price doz.
P17.	Nos. 67-670	No. 1	3/4 lb.	\$5.75
P27	Nos. 67-670	No. 2	3/4 lb.	5.75
P11	Nos. 61-610	No. 1	3/4 lb.	5.75
P12	Nos. 61-610	No. 2	3/4 lb.	5.75
P13	Nos. 61-610	No. 3	3/4 lb.	5.75
P22	Nos. 62-620	No. 2	3/4 lb.	5.75
F23	Nos. 62-620	No. 3	3/4 lb.	5.75

CHUCK AND DRILL ATTACHMENTS

For Spiral Ratchet Screw Drivers

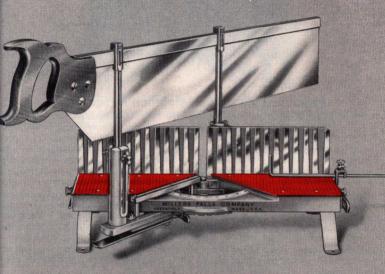


These attachments for the spiral ratchet screw drivers on page 39 convert them into an efficient automatic drill for boring small holes, greatly increasing the utility of the driver. The chuck has a ball lock that holds New Style, No. 401 Drill Points securely. It has a knurled tightening nut which is nicely polished, as is the shank. Eight sizes of drills, 1/6 to 1/4 inch in diameter.

	Screw Driver	Drill Points	Sizes	Weight	Code	Price each
No. 6700	Nos. 67A and 670A	3	1 to 3	1/8 lb.	GAMOT	\$0.70
No. 6100	Nos. 61A and 610A	8	1 to 8	1/4 lb.	GAMIC	1.30
No. 6200	Nos. 62A and 620A	8	1 to 8	1/4 lb.	GAMOX	1.30

Packed one in a round wooden box

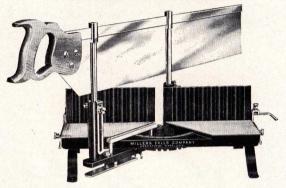
MITRE







ALL STEEL MITRE BOXES



UNBREAKABLE ALL-STEEL CONSTRUCTION THROUGHOUT

Every part in the assembly of this fine box is made of steel. It is unbreakable and free from replacements or repairs. The design and construction guarantee continuing accuracy of angular and vertical cuts and lasting durability.

The swinging lever, carrying the posts and saw guides which operate in them and the locking devices, swings freely from 45° to 90° left or right. It can be positively set at the most used angles by means of the lever lock which engages the precisely located notches on the lower side of the graduated quadrant. Or it may be set at any intermediate angle by means of the compression lock.

The extra long saw guides are equipped with three point "Oilite" bronze bearings giving almost effortless saw travel. They also have adjustable gauges for maintaining the proper maximum depth of cut with relation to the bed plates after saw filing. The guides hold the saw in the elevated position illustrated, when not in use, by means of automatic spring catches located in the posts. Depth gauges located on the side of the posts limit the cut to any desired depth.

A length gauge is provided on one end and a stop on the other end of the bed for cutting angles more acute than 45° and holding work against the back. The bottom plates are roughened to keep the work from slipping.

Each box is thoroughly tested for accuracy using the high grade back saw that is shipped with it. Boxes without saws are available but their accuracy cannot be guaranteed.

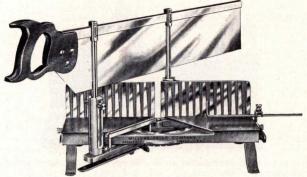
The bed, back, swinging lever, posts and legs are finished in black enamel; the bed plates in red enamel. All exposed metal parts nicely nickel plated.

Capacity of all sizes, with swinging lever extended, is $10\frac{1}{2}$ inches at right angle, $7\frac{1}{4}$ inches at mitte. Length of bed $19\frac{3}{6}$ inches; width $4\frac{1}{2}$ inches; height of back $3\frac{3}{4}$ inches.

		Prices	Complete	with Saw			
	Size Saw		Weight		Weight	Code	Price each
No. 1244C	24 x 4"	217	2 lbs.	271/	2 lbs.	ZITRE	\$45.40
No. 1264C	26 x 4"		lbs.	28	lbs.	ZITUV	46.00
No. 1285C	28 x 5"		lbs.	31	lbs.	ZITWY	50.00
No. 1305C	30 x 5"	231/	i lbs.	31	lbs.	ZIUGH	54.00
No. 1306C	30 x 6"	25	lbs.	33	lbs.	ZIUHJ	57.00
		Pric	es witho	ut Saw			
No. 1002C for 4	" Saw	18	lbs.	22	lbs.	ZIRNA	32.80
No. 1003C for 5'		19	lbs.	23	lbs.	ZIROR	35.80
No. 1004C for 6'		20	lbs.	24	lbs.	ZIRPE	39.00
		Park	ed one in	a carton			



LANGDON ACME MITRE BOXES



Three Point "Oilite" Bronze Bearing Saw Guides

don Acme has always been the outstanding metal mitre box. Now, more than ever, it is the desirable box made.

e one piece cast bed and back have been redesigned for much greater strength and are precisely d at right angle to one another. The legs are made of steel and are extended for greater ility.

e extendable, swinging lever is now made of solid steel as are the posts and saw guides. The guides are equipped with three "Oilite" bronze bearings providing easier and smoother travel.

ounted on the steel posts in which the saw guides operate are adjustable depth gauges to regulate depth of cut and also stops to hold the guides and saw elevated for quick changing of work he bed. Still another adjustment is provided on the guides to maintain the proper maximum h of cut with relation to the bed plates and to compensate for filing of the saw.

e swinging lever travels freely from 45 to 90° right or left and locks automatically at the most angles. It can be locked at any intermediate angle by means of the additional compression lock.

length gauge is provided on one end of the bed and a stop for cutting acute angles or holding against the back on the other. The bed plates are steel scored to prevent slipping.

e highest quality back saws are supplied, each tested for accuracy in the box with which it is bed. The accuracy of boxes shipped without saws cannot be guaranteed.

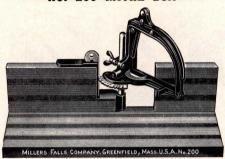
e bed, back, swinging lever, posts and legs are finished in gray enamel. The bed plates are enameled. All exposed metal parts, except the saw, nickel plated.

eximum capacity of all sizes $10\frac{1}{2}$ inches at right angle; $7\frac{1}{4}$ inches at mitre. Length of bed inches; width $4\frac{1}{2}$ inches; height of back $3\frac{3}{4}$ inches.

		Prices Complet	te With Saw		
	Size Saw	Net Weight	Shipping Weight	Code	Price each
72C	24 x 4"	27 1/2 lbs.	33 1/2 lbs.	LADDE	\$45.40
73C	26 x 4"	28 lbs.	34 lbs.	LADIM	46.00
/3C /4C	28 x 5"	29 lbs.	37 lbs.	LADLE	50.00
75C	30 x 5"	29 1/2 lbs.	37 1/2 lbs.	LAGER	54.00
		Prices With	out Saw		
071C	For 4 inch saw	24 lbs.	28 lbs.	LAIRD	32.80
1074C	For 5 inch saw	25 lbs.	29 lbs.	LAITY	35.80
135		Packed one i	n a carton		



NO. 200 MITRE BOX



The frame of this box is made of laminated wood. The saw guide is designed so that either a box or panel saw may be used.

The saw guide is mounted on a steel post and can be adjusted freely for various angles and height It is provided with three screws for adjustment to the thickness of the saw blade used.

A steel index plate, indexed and clearly marked for the six commonly used angles, 0, 9, 22/2 30, 36 and 45° , right or left, is fixed to the saw guide. To set the guide at any one of these angle the steel slide key in the frame of the box is lifted and the guide swung until the proper notch in the index plate is opposite the key. The key is then pushed down until it seats firmly in the notch.

Any intermediate angles can be obtained by using the thumb screw at the back of the saw guide. This thumb screw is also used for setting the guide at any desired height.

When a back saw is used exact depths can be sawed by raising the saw guide on its post to the proper height so that the shoulders provided prevent the saw going below the desired point.

Bed filled and lacquered. All castings black enameled.

No. 200

Dimensions 16 x 4 3/4 x 4"

7 lbs

Code LITER Price each

Packed one in a carton

NO. 214 SAW SET



A sturdy set of pistol grip design with a powerful leverage that makes it easy to obtain a positive and uniform set or any saw with a pitch of from 2 to 14 teeth per inch. Good visibility so that the hardened, triangular-shaped plunger on be centered quickly and surely on the tooth to be set.

The anvil is carefully hardened and is quickly adjustable to the pitch of tooth to be set. This adjustment is locked by means of the upper knurled thumb nut. An adjustable stee guide is also provided.

Frame and handles are finished in gray and red ename.

All steel parts nickel plated except the hardened anvil.

Capacity Pitches 2 to 14

Weight
4 1 ½ lbs.

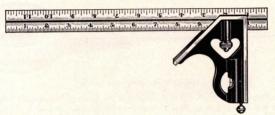
Packed one in a box

YEPRA

A \$2.80



CARPENTERS' COMBINATION SQUARES



Etched Graduations Level and Scriber

e are accurate, well-finished squares, made especially for the carpenter. They can be used as a quare, mitre square, depth gauge, marking gauge or as a level or plumb.

e steel blades are 9 or 12 inches long and 1 inch wide, accurately graduated in 8ths and 16ths ne side and 16ths and 32nds on the other. The graduations and figures are clearly etched tamped.

e beam has accurately milled working faces with polished edges and black enameled web. It a cat's-eye level vial accurately set in the body which can be used either as a level or a plumb. ordy, well-pointed scriber is also supplied.

e beam can be slipped along the scale and locked at any point by tightening the knurled thumb nut.

Packed one in a box





Etched Graduations

a accurate, well-finished square made especially for the carpenter. It serves a number of important tions such as try square, mitre square, depth gauge or marking gauge.

e steel blade is 12 inches long and 1 inch wide. It is well finished and clearly and accurately duated in 8ths and 16ths on one side and 16ths and 32nds on the other. Both figures and duations are extremely legible as they are deeply etched — not stamped.

e working faces of the beam are accurately milled with polished edges. The web is finished in sy black enamel. When the knurled binder nut is loosened the blade can be moved to left or right lesired and locked at any point.

lesired and locked at any point.

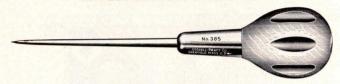
Length Blade Weight Code Price each
1000 12" 14 ozs. ZIRAD \$1.40

Packed one in a box



No. 211

NO. 365 DIAMOND POINT AWL



Forged Blade with Steel Bolster

This good tool has thoroughly demonstrated its quality in the hands of thousands of users. Its usefulne is almost unlimited and no tool box or shop is complete without one. It is indispensable for laying work on wood, soft metals and other similar materials; making holes for starting nails or screws a innumerable other uses.

The blade is hammer-forged tool steel, carefully hardened, tempered and polished. It runs cle through the handle and is locked into a steel head set flush with the end of the handle. The hand protected by a heavy, nickel plated steel ferrule, is selected hardwood with a natural lacquer fin

and is fluted to give a good grip. These flutes also prevent the tool from rolling. Blade Overall Weight Code Price o No. 365 31/2" 6 3/4" 3 ozs. YOANE \$8.

Packed six in a box



A smaller, lower priced awl that is equally useful. The blade, 25% inches long, is nicely pointed, tapen and polished. The blade is securely set in a solid, hardwood handle protected by a nickel plat

ferrule. Handle finished in natural lacquer. Price o Weight Code 5" YOALO \$2. No. 10 3 1/2' 1 oz.

Packed one dozen in a box NO. 211 TACK CLAW



The blade of this very efficient tool is carefully shaped and finished for pulling tacks and small, head nails rapidly and with little or no effort. It is forged from a high grade of ½ inch steel, hardene tempered and polished. The comfortable, hardwood handle is protected by a nickel plated ferri

and nicely finished in mahogany lacquer. Length Overall Weight Code \$0.

3 1/2 ozs. Packed six in a box YEPIX



NO. 227 BUTT GAUGE



s installation of butts and hinges has been simplified and speeded up by the redesign and improvent of this tool.

he body is made of two smooth die castings. The rods are steel, accurately graduated, with sharp, dened, double edged spurs that make legible marks easily.

Vorking faces of the body are polished with the rest of the body finished in gray enamel. Rods and orled set screws nickel plated.

. 227

Length 3 ½"

Weight 8 ozs. Packed one in a box Code YETRE Price each

CARPENTERS' PLUMB BOBS

ese plumb bobs are accurately machine turned from cold rolled steel with the points efully sharpened. They hang true and insure positive accuracy in plumbing and eling.

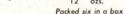
hey are nicely polished and nickel plated.

Len	gth
23	3/4"
31	/2"
4	"
5	u

Weight
3 ozs.
5 ozs.
7 1/2 ozs.
12 ozs.

Code LLOYD LOACH LIVER LOANY \$0.40 .50 .70





NO. 56 BENCH HOOK



A strong, rugged tool with a head having four different faces, any one of which can be used in the working position and set at any desired height up to 1½ inches. Spring automatically raises hook when lock is released. These adjustments are controlled by the lock screw in the center arm. Quickly and easily installed by simply boring two holes: one 2 inches in diameter ½ inches deep, and one 1 inch in diameter clear through the bench and setting two screws.

The steel hook is nickel plated. The edge of the socket is polished and the inner surface red enameled.

No. 56 1 1/4"

Weight
11 ozs.
Packed six in a box

Code

Price each \$1.65



NO. 396 COUNTERSINKS





Rose Pattern for use in mild steel, iron and soft metals

These countersinks with square bit brace shanks, available in three diameters, are hammer forged from a high quality of tool steel carefully hardened and tempered. The flutes are milled and the cutting edges ground. Angle 82°.

	Diameter	Length	Weight	Code	Price doz
No. 396	1/2"	4 1/4"	2 ozs.	YOFIM	\$8.00
No. 396	5/8"	4 1/4"	2 ozs.	YOFOX	8.00
No. 396	3/4"	4 1/4"	2 ozs.	YOFME	8.00
		Packed	six in a box		

NO. 394 COUNTERSINK



Two lipped for wood and other soft materials

Hammer forged from high quality tool steel with two cutting lips and square bit brace shank carefully hardened and tempered. Head and body polished. Angle 82°.

	Diameter	Length	Weight	Code	Price doz.
No. 394	3/4"	4 1/4"	2 ozs.	YOFEM	\$8.00
		Packed	six in a box		



NO. 410 COUNTERSINK



For use in Power Tools

For countersinking holes to admit the heads of standard screws in mild steel, iron, soft metals, wood and similar materials. Turned from a high quality tool steel with milled flutes and ground edges. Fitted with ½ inch round shank for use in three-jawed chucks of hand or power driven drills. Nicely polished. Angle 82°.



NO. 4100 DISPLAY UNIT

COUNTERSINKS AND SCREW DRIVER BITS

bright, very substantial unit that displays these all tools to excellent advantage and originates my sales.

The base is made of solid pine and the upright nel of masonite. It is lacquered and silk screened three colors, red, gray, and black.

Base 5" by 6 3/4"; Height 9".

Supplied entirely free with the following assortent:

> 6 No. 410 Countersinks 4 No. 394 Countersinks

2 No. 396 34" Countersinks 3 No. 396 58" Countersinks

3 No. 396 1/2" Countersinks
6 No. 351 Ass't Screw Driver Bits

. 4100 Display Unit Complete

\$12.60

Packed one unit in a carton



NO. 11 BIT EXTENSIONS



esigned to follow an ½6 inch bit or larger but not recommended for bits larger than ½6 inch. A neat, ong extension of the solid socket type with socket forced on to the shank and pinned. Chuck shell ade of heavy seamless tubing is controlled by a coarse thread operated by turning the knurled collar. the tool nicely polished.

	Length	Weight	Code	Price each
. 11 . 11 . 11	18" 21" 24"	1 lb. 1 1/8 lbs. 1 1/4 lbs.	CAMED CAMFO CAMIS	\$3.40 3.55 3.65
		Packed one in a box		

NO. 35 BIT EXTENSIONS



esigned to follow an ½ inch bit or larger but not recommended for continuous use on bits larger an ½ inch. The one-piece socket and shank construction of this extension makes it very strong, huck shell of extra heavy steel tubing. Drop-forged steel jaws positively seated in socket hold bits turely and in good alignment. Chuck operated by turning knurled collar. Upper hexagon portion or tightening with a wrench when desirable.

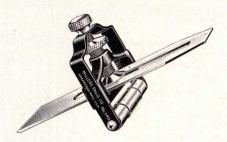
Price each Code Length Weight \$3.40 CABIO 13 ozs. 18" o. 35 21" CACKO 3.55 14 ozs. o. 35 3.65 24" CADDY 16 ozs. o. 35

Packed one in a box



NO. 240 CHISEL AND PLANE IRON SHARPENER





A very simple but efficient device for putting a fine edge on chisels, plane irons and other edged tools

It overcomes the imperfections of free-hand sharpening and honing, insures a perfectly flat beve at any desired angle, saves time and prolongs the life of the blade.

The blade is held rigidly in the holder by means of the lower knurled thumb screw and the angle adjustment is controlled by the upper thumb nut. Still further angle adjustment can be secured by changing the position of the blade in the clamp.

After firmly clamping the blade, place the tool on an oilstone or hone and adjust to the desired angle or bevel. The roller bearing rolls freely on the stone and a keen edge is secured in a minimum of time

No. 240

Capacity
2 5/8"

Weight

Code ESDER Price each

Packed one in a box

NO. 36 BIT GAUGE



Fits any type of auger bit, clamping securely to the twist of the bit. Clamp controlled by two steel wing nuts. Two smooth shoes prevent marring of the work. Entire tool nickel plated.

No. 36

Length 2"

Weight 4 ozs.

Code

Price each \$0.75

Packed six in a box



Price each

EXPANSIVE BITS



No. 48

finely made and finished bit of the Clark Pattern with spurs, cutting edges, throats, screws and ters designed to function in unison to give a fast, clean cutting bit. Made of the highest quality ecial bit steel throughout. Each bit equipped with two cutters.

All parts of the bit highly polished except the square shank.

Capacity

	Capacity	Weight Code	Price each
. 47	1/2 to 1 1/2"	3/8 lb. BARDO	\$1.90
. 48	7/8 to 3 "	1/2 lb. BOLLO	3.10
		Packed one in a box	
		Extra Cutters	
THE BUILDING	Fitting	Capacity	Price doz.
o. 1	No. 47	1/2 to 7/8"	\$4.10
. 2	No. 47	7/8 to 1 1/2"	5.05
5. 3	No. 48	7/8 to 1 3/4"	7.15
. 4	No. 48	1 3/4 to 3 "	8.50
o. 4 o. 5	No. 48	3 to 4 "	12.75
0. 6	No. 48	4 to 5 "	17.00

SCREW ADJUSTING EXPANSIVE BITS



No. 151

finely made and finished bit with a positive screw adjustment of the cutter which absolutely prevents ifting even in the toughest woods. The cross feed screw meshes with the cutter and also the plate. The complete turn of screw increases or decreases diameter of hole 1/8 inch.

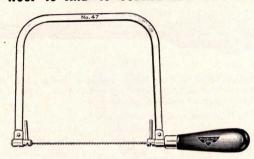
The deep, clean cut screw, sharp spurs and cutting edges make it an extremely easy boring bit. Two tters. All parts of the bit highly polished except the square shank.

o. 151	5/8 to 1 3/4"	3/8 lb.	BONOR	\$2.35
o. 152	7/8 to 3 "	1/2 lb.	BOMIT	3.40
	P	acked one in a box		
		Extra Cutters		
	Fitting	Сарс	icity	Price doz.
o. 1	No. 151	5/8 to	1 1/8"	\$3.90
o. 2	No. 151	1 1/8 to	1 3/4"	4.85
o. 3	No. 152	7/8 to	1 3/4"	6.80
0.4	No. 152	13/4 to	3 "	7.75
o. 4 o. 5	No. 152	3 to	4 "	11.60
	No. 152	4 to	5 "	15.45

Be sure to specify number of bit cutters are to fit



NOS. 43 AND 47 COPING SAW FRAMES



These fine frames are identical except for their depth of throat. The frame is made of $\frac{3}{16}$ x $\frac{3}{16}$ indround edge spring steel. The studs are designed for holding 6 or $\frac{6}{2}$ inch coping saw blades of the loop, pin and other types. The pins set firmly in the studs permit the blade to be turned in any desired direction. Tension on the blade is controlled by turning the mahogany lacquered hardwood handle. One No. 65 blade furnished with each frame.

All exposed metal parts heavily nickel plated and buffed.

	Depth Throat	Weight	Code	rrice ec
No. 43	4 3/4"	6 ozs.	IRIAN	\$1.2
No. 47	61/2"	9 ozs.	IRITO	1.4
	N 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	No	17 nacked four in a box	

No. 43 packed six in a box

No. 47 packed four in

NO. 50 COPING SAW BLADES

These blades of the loop or turned end pattern are made of fine steel uniformly heat-treated to produce excellent results. The teeth are keen and properly set for fast, clean cutting.

	Size	Weight Gross	Code		Price gross
No. 50	6 x 1/16"	6 ozs.	IROUS	Wired	\$3.00
No. 50	6 x 1/16"	6 ozs.	IROUX	In Envelopes	3.10

Packed one dozen in an envelope or in bulk in wired bundles of one gross consisting of 12 bundles of one dozen each

NOS. 60 AND 65 COPING SAW BLADES

Pin pattern blades are heavier, cut faster and straighter and will outwear the finer tooth blades. Both fit the Nos. 43 and 47 Coping Saw Frames.

 Size
 Weight Gross
 Code
 Price grow

 No. 60
 6 x 3/2z"
 9 ozs.
 ISCHI
 \$3.30

 No. 65
 6 ½ x 3/3z"
 11 ozs.
 ISIAC
 3.30

Packed one dozen in an envelope



NO. 106 CARVING TOOL SET

et of six carefully selected tools to give as wide range of operation and effects as possible in od, linoleum, soap and similar materials.

the blades are forged from high quality steel, efully heat-treated to hold a keen edge and ely polished. The handles, protected with teled ferrules, are hardwood with a mahogany quer finish.

et consists of one each of the following tools:

3/8 1/4 3/8 3/32 3/32

6"	Straight Chisel	\$0.75
"	Bent Chisel	.65
"	Skew Bevel Chisel	.65
"	Bent Gouge	.75
2"	U Tool	.75
2"	Veining Tool	.85

 MILLES PALLS

MILLES PALLS

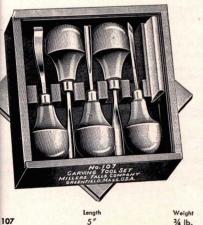
MILLES PALLS

CARVING FOR SET OF SET

Code YAYNA Price set \$4.40

Packed one set in a box

NO. 107 CARVING TOOL SET



This inexpensive set has started thousands in the fascinating hobby of wood and linoleum block carving. It is particularly suited for the Boy Scouts and many other handicraft groups.

The blades are forged from high quality steel, carefully heat-treated and nicely finished. The hardwood handles, which fit snugly into the palm of the hand, are finished in clear lacquer. They are flatted on one side so they are in proper position when picked up from the bench.

The set consists of one each of the following:

В	3/8"	Bent Chisel	\$0.65
C	1/4."	Skew Bevel Chisel	.65
D	3/8"	Bent Gouge	.75
E	3/32"	U Tool	.75
F	3/32"	Veining Tool	.85
		Sharpening Stone	.35
		Code	Price set
		YOYOL	\$4.00

Packed in a lacquered lock corner wood box with slide cover



GLASS CUTTERS AND WHEELS

There are several fine details that enter into the manufacture of Millers Falls Glass Cutters that a not generally appreciated. A very fine grade of alloy steel is used in making the wheels white of course, are the vital part of the tool. The wheels must be machined with precision to provide it the exact bevel on the edge for maximum cutting efficiency, exactly the right diameter hole for the pin on which it is to rotate, and the exact width for the frame in which it is to run.



The heat treatment given the wheels is unique and extremely precise — being he within very close limits. The process is the result of fifty years of research and expendence in the perfection of these small cutters.

After hardening and tempering, the wheels are twice honed in oil on exceeding fine India wheels to the critical angle or bevel that gives the easiest cut, cleanest bred and the longest life on the grade of glass they are intended to cut.

Every Millers Falls Glass Cutter is actually tested on glass by a skilled operative before final acceptance. They are strung on wire and sealed for positive identification as to type.

ype		
2	Red	Se

Red Seal Blue Seal Black Seal Fitting Cutters Nos. 1 and 478 337 and 444 218

\$1.0 1.5

Packed one dozen or ten dozen in an envelope

NO. 444 GLASS CUTTER



The perfect finger-fitting form of the frame of this cutter has made it a tremendously popular too It drops into natural position between the first two fingers and can be used for hours without fatigue or discomfort.

It is equipped with a tested Type D wheel set in a well-polished frame with three standard width of breaker notches. The handle is finished in bright blue enamel with a red tip.

No. 444

Length 5 1/4" Weight doz.

Code YOMVE Price do

Packed one in a carton; one dozen cartons in a box



NO. 4412 FREE DISPLAY

The attractive counter display unit illustrated, holding twelve cutters, will be supplied entirely free with an initial order for two dozen No. 444 Cutters. Weight of display only 1/8 lb.



NO. 1 TURRET HEAD GLASS CUTTER

is the original turret head glass cutter patented by odell-Pratt which has earned and maintained such a arkable reputation for fine performance and low cost ration. Henceforth, this popular cutter will be branded ers Falls.

ne turret is turned from a solid bar of selected steel with six wheel axles, integral parts of the turret. Infinite care ken in the heat treatment so that the axles will outwear ny wheels. The turret and turret screw are rust-proofed the Udelyte process.

ix honed and tested Type C "Red Seal" wheels are unted on the turret axles. Turret and wheels are locked the highly polished and nickel-plated steel frame by ans of a rust-proofed screw. Wheel No. 1 is used until n out, then the screw is loosened and wheel No. 2 rotated position and so on until all six have been used. Always st on genuine Type C Wheels for replacements.

he handle is hardwood, comfortably shaped, nicely hed in mahogany lacquer and protected by a buffed el ferrule.

very genuine No. 1 Turret Head Cutter has the Millers s name stamped on the frame and handle and is ked in a distinctive three-color carton.

Length



Weight doz. 5 3/8" 1/8 lb. WYBCE Packed one in a box; twelve boxes in a display carton illustrated above

NO. 337 GLASS CUTTER



icely balanced cutter with a comfortable handle on the end of which is a breaker ball that has icient weight to get excellent results.

is equipped with a high grade tested Type D wheel set in a well-polished frame. The three idard widths of breaker notches are provided. The handle is finished in black and the breaker in red.

> Length 5"

Weight doz. 1 1/2 lbs.

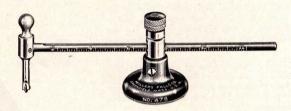
Code YIRUX Price doz. \$3.50

337

Packed one in a carton; one dozen cartons in a box



NO. 478 CIRCULAR GLASS CUTTER



Circles or arcs of circles from 2 to 12 inches in diameter are quickly and accurately cut with this to

It is equipped with a tested Type C wheel set in a head at the end of a graduated beam. Whe can be replaced very easily. The beam pivots freely in the metal standard so that the complete circ can be cut in one continuous sweep. To free the circle without breakage, six or more tangents should be cut with a straight cutter.

No. 478

Capacity
2 to 12"

Weight 1/2 lb.

Code YOSAZ Price e

Packed one in a box

NO. 218 GAUGE GLASS CUTTER



The most practical tool ever designed for cutting the gauge glass ordinarily used in steam and hot wa boilers and liquid gauges.

Owing to the very hard glass used in these gauges this cutter is supplied with a tested spec Type F "Black Seal" wheel which is set at the end of a graduated steel beam and cuts from the inside giving a good clean break. The wheels are easily replaced. The length of glass cut off is determined be setting the sliding gauge on the graduated arm. The second steel beam merely counterbalant the cutting pressure on the outside wall of the tube. The steel beams are nicely polished and nickels Maximum cut six inches. Handles finished in red and black lacquer.

No. 218

Length 12 1/2"

Weight 3/4 lb.

Code YERRO Price e

Packed one in a box

FORGED TOOLS

MILLERS FALLS
TOOLS



NO. 1216 STAR DRILLS



These drills have remarkable free, fast cutting ability in concrete, brick and stone.

They are forged from a high grade of octagon alloy steel selected for its toughness and abil to hold an edge. The bit and head are carefully hardened and tempered for the severe servexpected of them.

The bits and flutes are designed and proportioned to give ample strength and provide adequation clearance. The flutes taper back slightly and their outer face is ground concentric with the to insure free turning. The bit is pointed just enough to start holes easily at the desired point a keep it centered. The blades are long to permit resharpening without reforging.

The blades are polished and the head of the tool is finished in vermilion lacquer with polished fa The body is finished in aluminum lacquer.

	Diameter of cut	Diameter of stock	Length	Packed per box	Weight dozen	Code	Price
No. 1216	1/4"	3/16"	12"	12	2 1/8 lbs.	ZOKLA	\$6
No. 1216	5/16"	1/4"	12"	12	2 1/4 lbs.	ZOKLY	6
No. 1216	3/8"	5/16"	12"	12	3 1/8 lbs.	ZOKME	6
No. 1216	7/16"	3/8"	12"	12	4 5/8 lbs.	ZOKMO	7
No. 1216	1/2"	3/8"	12"	6	4 5/8 lbs.	ZOKOP	7
No. 1216	9/16"	7/16"	12"	6	6 1/4 lbs.	ZOKOS	8
No. 1216	5/8"	1/2"	12"	6	8 1/8 lbs.	ZOKPO	9
No. 1216	3/4"	5/8"	12"	6	121/2 lbs.	ZOKYR	- 9
No. 1216	7/8"	5/8"	12"	6	121/2 lbs.	ZOKYT	11
No. 1216	1"	3/4"	12"	3	17 5/8 lbs.	ZOLAM	12
No. 1216	1 1/8"	7/8"	12"	3	25 lbs.	ZOLAS	15
No. 1216	1 1/4"	7/8"	12"	3	31 1/2 lbs.	ZOLEN	2
No. 1216	1 3/8"	1 "	12"	1	32 1/4 lbs.	ZOLET	20
No. 1216	1 1/2"	1 1/8"	12"	1	36 3/4 lbs.	ZOLIP	30

NO. 470 CHISEL AND PUNCH SET





A most useful set of twelve forged chisels and punches put up in a convenie turned hardwood box with a mahogany lacquer finish.

The set consists of the twelve tools listed below which are fully describ on the following pages.

1 No. 573 ½" Taper Pin Punch
1 No. 573 ½" Taper Pin Punch
1 No. 1140 ½" Cape Chisel
1 No. 1140 ¼" Code Chisel
1 No. 1150 ¼" Cold Chisel
1 No. 1150 ½" Cold Chisel
1 No. 1150 ½" Cold Chisel
1 No. 1178 ½" Diamond Point Chisel
1 No. 1178 ½" Diamond Point Chisel
1 No. 1170 ½" Round Nose Cape Chisel

1 No. 1190 ⅓" Round Nose Cape Chise 1 No. 1195 ½" Solid Punch 1 No. 1199 ⅓" Prick Punch

1 No. 1199 3/8" Prick Punch 1 No. 1202 3/8" Center Punch

Each tool forged from octagon alloy steel, carefully hardened and tempered with well ground polished points and heads.

No. 470

2 1/2 lbs.

Code

Price set \$4.90

Packed one set in a box



FORGED TOOLS

e chisels and punches shown on this and the following pages are hammer-forged from a high grade octagon alloy steel selected for its extreme toughness. The care exercised in heat-treating results a uniformly high grade chisel. The blades and heads are ground and nicely polished. The heads we a distinctive vermilion lacquer finish.

NO. 1150 COLD CHISELS

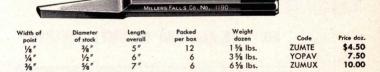
		MILLER	RS FALLS CO. No.	1150	B	
Width of blade	Diameter of stock	Length overall	Packed per box	Weight dozen	Code	Price doz.
1/4"	1/4"	5"	12	7/8 lb.	ZUKER	\$3.20
3/8"	5/16"	5"	12	1 3/4 lbs.	YOOKE	3.70
1/2"	3/8"	5"	12	2 3/8 lbs.	YOOLV	4.00
5/8"	1/2"	61/2"	6	4 1/4 lbs.	YUZYR	6.60
3/4"	5/8"	7"	6	7 lbs.	ZABAM	8.90
1 "	7/0"	8"	3	151/2 lbs.	ZEAHY	15.40

NO. 1140 CAPE CHISELS

. 1178 . 1178 . 1178

(B) (200		MILLE	MILLERS FALL'S Co. No. 1140			
Width of blade	Diameter of stock	Length overall	Packed per box	Weight dozen	Code	Price doz.
1/8"	3/8"	5"	12	1 5/8 lbs.	YOORC	\$4.50
3/16"	3/8"	5"	12	1 3/4 lbs.	ZEENG	5.00
1/4"	3/8"	5"	12	1 1/8 lbs.	YOOPZ	5.50
5/16"	1/2"	6"	6	3 3/4 lbs.	ZEEPH	7.50
3/8"	5/8"	7"	6	6 1/2 lbs.	ZEERK	10.00
1/6"	3/4"	7 1/2"	6	10 1/4 lbs.	ZEEWP	13.80

NO. 1190 ROUND NOSE CAPE CHISELS



NO. 1178 DIAMOND POINT CHISELS

272	44 48		A A-V-1 Bit	AND THE PERSON NAMED IN	THE STREET	
Width of	Diameter of stock	Length overall	Packed per box	Weight dozen	Code	Price doz.
5/32 "	3/8"	5"	12	1 3/4 lbs.	YOOVG	\$3.40
1/4"	1/2"	6"	6	3 3/4 lbs.	ZULVO	6.40
3/8"	5/8"	7"	6	7 lbs.	ZUMAS	9.00



Diameter

NO. 1202 CENTER PUNCHES



Price doz

Price do

Price do:

\$4.0

\$4.0

\$4.00

6.60

Weight Packed Diameter Length Code of stock overall per box dozen 5" 1 3/4 lbs. YOPUB 3/8" 12 No. 1202 51/2" 3 1/4 lbs. ZUNOY 1/2" 6 No. 1202

NO. 1199 PRICK PUNCH



Weight

Length dozen Code per box of stock overall 5" 12 1 5/8 lbs. YOPOZ No. 1199 3/8"

NO. 1195 SOLID OR TINNERS' PUNCH



Packed Weight Diameter Diameter Length dozen Code of point of stock overall per box YOPCY 5/32" 3/8" 5" 12 1 3/4 lbs. No. 1195

NO. 1208 ALIGNING OR DRIFT PUNCHES



Indispensable tools for construction work, in automotive shops, farms, or any job where holes must be brought into close alignment for riveting or bolting.

The long, evenly tapered points on these fine tools are very highly polished to a mirror finish so that they drive easily and loosen up readily. They will not bend or break.

	Diameter of point	Diameter of stock	Length	per box	dozen	Code	Price doz
No. 1208	3/16"	1/2"	10"	3	5 1/8 lbs.	ZUNUZ	\$10.60 14.50
No. 1208	1/4"	5/8"	12"	3	9 1/8 lbs.	ZUNVE	14.50



NO. 573 TAPER PIN PUNCHES



orged from a high grade of octagon alloy steel, $\frac{3}{6}$ inch in diameter, except the two smallest sizes hich are $\frac{1}{6}$ inch. They are carefully heat-treated and the points and heads well ground and polished. Ney have the same distinctive vermilion lacquered head that is used on the rest of the punch and itsel line.

	Size	of stock	Length	dozen	Code	Price doz.
o. 573	3/32"	1/4"	5"	3/4 lb.	YUMEZ	\$4.40
o. 573	1/8"	1/4"	5"	3/4 lb.	YOHYT	4.40
o. 573	5/32 "	3/8"	6"	1 3/4 lbs.	YUMIB	4.40
o. 573	3/16"	3/8"	6"	1 3/4 lbs.	YOILT	4.40
o. 573	7/32 "	3/8"	6"	1 3/4 lbs.	YUMOC	4.40
o. 573	1/4"	3/8"	6"	1 1/8 lbs.	YOIPY	4.40
o. 573	5/16"	3/8"	6"	21/8 lbs.	YOIRB	4.40
o. 573	3/8"	3/8"	6"	2 3/8 lbs.	YOJAP	4.40
		Pa	cked one dozen	in a box		
				Weight	Code	Price set
o. 472 Se	et of 5: (1/8, 3/16,	1/4. 5/16 and 3/8")		7/8 lb.	YOREZ	\$1.80

NO. 572 PIN PUNCH SET

Packed one set in a box

useful and convenient set made up of the eight sizes of punches nown above, as follows: one each 3/2, 1/2, 1/2, 1/2, 1/4, 1/4, 1/4 and 3/8".

The container is a round hardwood block and cover nicely turned nd finished, providing a convenient holder.

Weight Code
VUMCO

Packed one set in a box



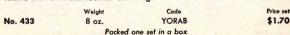
NO. 433 CHISEL AND PUNCH SET

A set of four quality tools selected by and made up for several nationally known aviation training schools.

The four tools consist of:

1 No. 573 3/2" Pin Punch 1 No. 573 1/8" Pin Punch 1 No. 573 3/2" Pin Punch 1 No. 1150 3/8" Cold Chisel

These are all hammer-forged from high grade octagon alloy steel with polished points and heads. The case is made of a serviceable fabric with artificial leather covering.







NO. 681 MACHINISTS' PIN PUNCHES



These punches are made from a very high grade of round tool steel about four inches long. The centers are knurled and the points, shanks and heads nicely polished. Every punch is very carefully hardened and tempered its entire length. Blued finish.

	Points	Stock	Weight doz.	Code	Price doz
No. 681	1/16"	5/16"	3/4 lb.	ZALIZ	\$2.60
No. 681	3/32 "	5/16"	3/4 lb.	ZALOB	2.60
No. 681	1/8"	5/16"	7/8 lb.	ZALUC	2.60
No. 681	5/32 "	5/16"	7/8 lb.	ZALWA	2.60
No. 681	3/16"	5/16"	₹ lb.	ZALYE	2.60
No. 681	7/32 "	5/16"	₹ lb.	ZAMAY	2.60
No. 681	1/4"	3/8"	1 1/4 lbs.	ZAMCO	2.60
No. 681	5/16"	3/8 "	1 1/4 lbs.	ZAMEZ	2.60

Packed one dozen in a box

NO. 997 HOLLOW PUNCHES



These punches are made from a very high grade of round tool steel about four inches long. The centers are knurled to insure a firm grip. They are very carefully hardened and tempered their entire length. The cutting edges are sharpened.

Made in fifteen sizes as follows:

Size	Hole	Size body	Weight doz.	Code	Price doz
1	5/64"	3/8"	1 1/8 lbs.	ZINKA	\$4.60
2	3/32 "	3/8"	1 1/8 lbs.	ZINLE	4.60
3	7/64"	3/8"	1 1/8 lbs.	ZINNO	4.60
4	1/8"	3/8"	1 1/8 lbs.	ZINON	4.60
5	%4"	3/8"	1 1/8 lbs.	ZINUP	4.60
6	5/32 "	3/8"	1 1/8 lbs.	ZIOXY	4.60
7	3/16"	3/8"	1 1/8 lbs.	ZIPAL	4.60
8	7/32 "	7/16"	1 1/2 lbs.	ZIPEM	4.60
9	1/4"	7/16"	1 1/2 lbs.	ZIPLA	4.60
10	9/32 "	7/16"	1 1/2 lbs.	ZIPME	5.20
11	5/16"	1/2"	1 3/4 lbs.	ZIPOP	5.20
12	11/32"	1/2"	1 3/4 lbs.	ZIPPO	5.20
13	3/8"	9/16"	1 3/4 lbs.	ZIPPR	6.80
14	13/32 "	9/16"	2 lbs.	ZIPRA	6.80
15	7/16"	9/16"	2 1/8 lbs.	ZIPRI	6.80
	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1	1	1	1

Packed one dozen in a box



NO. 460 CENTER PUNCH



arge square head provides large striking surface and prevents rolling. Hardened, tempered and prefully ground points and heads. Bodies nicely knurled, balance of tool nicely polished.

o. 460

Body 5/16"

Length 4"

Weight doz. 17 ozs.

Weight doz.

Code MALTA Price doz. \$2.00

Packed one dozen in a box

NOS. 141 AND 146 CENTER PUNCHES



arefully ground, hardened and tempered points. Nicely knurled bodies. Shanks and heads polished.

Body lo. 141 5/16" 3/8" lo. 141 lo. 141

1/2" 1/2"

Length 4" 4" 4" 5"

7/8 lb. 1 1/4 lbs. 2 1/4 lbs. 2 3/4 lbs. Packed one dozen in a box

Code MALMA MANCH MANKS MANSE

Price doz. \$1.85 2.35 3.20 3.80

NO. 465 PRICK PUNCH



arge square head provides large striking surface and prevents rolling. Carefully formed point and nead are hardened and tempered. Nicely knurled body.

No. 465

lo. 146

Body 5/16

Length

Weight doz. 17 ozs.

Code MARES Price doz. \$2.00

Packed one dozen in a box

NO. 167 PRICK PUNCHES



Carefully formed points and heads are hardened and tempered. Bodies nicely knurled, balance of tool polished.

No. 167 No. 167

5/16 3/8"

Body

Length 4"

Weight doz. 3/4 lb. 1 1/4 lbs. Packed one dozen in a box

Code MARRY MARSH Price doz. \$2.10 2.60



NO. 800 SERIES OF NAIL SETS

New



This is the toughest, most serviceable nail set ever offered. It is made of fine quality molybdenum alloy steel, hardened and tempered to stand up under a lot of hard usage. The carefully cupped points are formed to give a good bite and equalize the stresses and strains so as to eliminate breakage. The deep knurling on the body gives a sure and comfortable grip. The square heads provide a large striking surface and at the same time prevent rolling. Points and heads are nicely polished.

Diameter Point	Body	Length	Weight doz.	Code	Price doz.
1/22"	5/16"	4"	1 lb.	MOBAN	\$2.40
		4"	1 lb.	MOBBO	2.40
		4"	1 lb.	MOBEX	2.40
		4"		MOBGA	2.40
		4"			2.40
	/10	CAR TO SEL			2.40
	Diameter Point 1/32" 1/32" 1/32" 1/32" 1/32" 1/32" 1/32" Assorted Dozen	\(\frac{1}{2}''\) \(\frac{1}{2	\frac{1}{32"} \frac{5}{16"} \frac{4"}{4"} \frac{7}{32"} \frac{5}{16"} \frac{4"}{4"} \frac{4}{32"} \frac{5}{16"} \frac{4"}{4"} \frac{4"}{52"} \frac{5}{16"} \frac{4"}{4"} \frac{4"}{4"} \frac{5}{12"} \frac{5}{16"} \frac{4"}{4"} \frac{4"}{4"} \frac{5}{16"} \frac{4"}{4"} \frac{4"}{4"} \frac{5}{16"} \frac{4"}{4"} \frac{4}{16"} \	\frac{\sqrt{2}\pi'}{\sqrt{2}\pi'} \frac{\sqrt{3}\epsilon'}{\sqrt{6}\pi'} \frac{4\pi'}{4\pi'} \qu	½" ¾6" 4" 1 lb. MOBAN ½" ¾6" 4" 1 lb. MOBBO ¾2" ¾6" 4" 1 lb. MOBEX ½2" ¾6" 4" 1 lb. MOBEX ½2" ¾6" 4" 1 lb. MOBGA ½2" ¾6" 4" 1 lb. MOBHI

Assortment consists of two each 1/32 inch and 1/32 inch an



NO. 825 NAIL SET DISPLAY

This attractive display stand holding the No. 800 Series Nail Sets has demonstrated its ability to multiply the volume of Nail Set sales many times. It is made of wood, nicely finished and silk screened in red, yellow and black.

Free with initial order for three dozen No. 815 Assorted Nail Sets.

No. 825 Display with three dozen Nail Sets 4 lbs. MOBIX \$7.20



NO. 310 NAIL SETS



A good sturdy set of conventional design. Regularly supplied with blued finish unless bright finish is specified. Points and heads hardened and tempered.

Digmeter point	Body	Length	Weight doz.	Code	Price doz.
and the same of th	5/14"	4"	7/8 lb.	MAGIC	\$1.80
		4"	7/8 lb.	MAGNA	1.80
		4"		MAGOT	1.80
		4"		MAGUS	1.80
		4"		MAHOL	1.80
	/10			MAHUT	1.80
	Diameter point 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12" 1/12"	\(\frac{1}{2}''\) \(\frac{5}{6}''\) \(\frac{5}{6	1/32" 5/6" 4" 3/32" 5/6" 4" 3/32" 5/6" 4" 4/32" 5/6" 4" 5/32" 5/6" 4"	\frac{1}{2}" \frac{1}{2}6" \tau \frac{1}6" \tau \frac{1}26" \tau \frac{1}{2}6" \tau \frac{1}26" \tau \frac	1/2" 5/6" 4" 7/8 lb. MAGIC

Assortment consists of two each ½ inch and ½ inch and four each ½ inch and ½ inch Packed one dozen of a size or assorted in a box





NO. 312 SET OF NAIL SETS

This set consists of one dozen assorted sizes of No. 310 Nail Sets put up in a turned hardwood box, as illustrated, finished in clear lacquer.

Weight Code Price set

No. 312 Set 1 1/4 lbs. MAINE \$2.10

Packed one set in a box



NO. 381 BEARING SCRAPERS



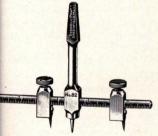
ese bearing scrapers are the best made. The slightly curved, tapering and recessed blade is signed to do nice scraping without chattering.

The blades are forged from a very high grade of tool steel correctly hardened and so carefully mpered that they will scratch glass and hold their keen razor-like edge over a long period. After sing dulled by long usage they can be easily sharpened by a few strokes on an oilstone.

Cutting edges well ground. Blades and shanks have a pleasing jetalize finish. Ferrules nickel ated. Hardwood handle finished in mahogany lacquer.

	Cutting edge	Length overall	Weight box	Code	Price each
. 381	1 1/2"	8"	3/4 lb.	YUNDO	\$0.80
. 381	2 1/2"	10"	1 1/8 lbs.	YOCYP	1.05
. 381	3 1/2"	11"	2 1/4 lbs.	YODAK	1.20
. 381	4 1/2"	12"	3 lbs.	YODEL	1.30
		Packed six in	a box		
	One eq	ch	Weight	Code	Price set
. 740 Set	11/2, 21/2 and 31/2"	cutting edges	7/8 lb.	ZAVIT	\$3.05
o. 471 Set	21/2, 31/2 and 41/2'		1 1/4 lbs.	YORCO	3.50

Packed one set in a box



NO. 82 GASKET CUTTER

An improved cutter with hardened and tempered tool steel cutters and point, both of which are easily replaceable. Cutters reversible to obtain maximum and minimum capacities. Heavy graduated steel beam flattened on top to give a good bearing for the knurled set screws. Hardened square bit brace shank. Made of steel throughout, well polished.

No. 82 % to 6" 9 oz. YADVT \$3.00

NOS. 92 AND 93 BRASS HAMMERS



these brass hammers will be found convenient and practical for use on finished work, or on any work where a soft hammer is desired. The brass heads and steel shanks are both nicely polished, and have hardwood handles with a mahogany lacquer finish.

	Head	Length	Weight	Code	Price each
No. 92	%6 x 1 3/4"	7 1/4"	5 oz.	YAUXT	\$1.25
No. 93	3/4 x 2 1/4"	8"	7 oz.	YAVEN	1.50
		Darked one is	n a box		



STEEL LETTERS AND FIGURES



These Steel Letters and Figures are made in two grades as specified below.

HAND CUT

HAND CUT. The finest quality of stamp procurable. Every character guaranteed hand cut from the finest grade of tool steel. Recommended for use on all hard surfaces.

The faces are accurately formed, sharply cut and deeply relieved, insuring clear, legible impressions. Faces and well-formed heads are hardened and tempered with the utmost care to make the stamps the best and most economical for general industrial use on both hard and soft surfaces.

MACHINE MADE. The characters in these sets are formed on blanks of a good quality of tool steed by a specially developed machine process using superior master dies producing sharper, cleaned faces than usual. Ample relief is provided to produce clear, long-lived impressions.

Carefully hardened and tempered faces. A fine, durable stamp for general all around use o unhardened surfaces.

MACHINE MADE

	GC	THIC I	FACE			RO	MAN F	ACE	
Height character	No. 1300 Letters per set	No. 1350 Figures per set	Single characters	Size stock	Height character	No. 1500 Letters per set	No. 1550 Figures per set	Single characters	Size stock
1/32"	\$15.75	\$5.25	\$0.65	1/4 x 2 5/8"	1/32" 1/24"	\$7.50 7.50	\$2.50	\$0.40	7/32 x 2 3/8
1/24"	14.15	4.70	.50	1/4 x 2 5/8"	1/20"	6.75	2.50 2.25	.35	7/32 x 2 3/8 7/32 x 2 3/8
1/20"	14.15	4.70	.50	1/4 x 2 5/8"	1/16"	5.25	1.75	.30	7/32 x 2 3/8
1/16"	11.25	3.75	.40	1/4 x 2 5/8"	1/12"	5.25	1.75	.30	7/32 x 2 3/8
3/32"	11.25	3.75	.40	5/16 x 2 3/4"	3/32 "	5.25	1.75	.30	7/32 x 2 3/8
1/8"	11.25	3.75	.40	5/16 x 2 3/4"	1/10"	5.25	1.75	.30	1/4 x 2 1/2
5/32"	12.60	4.20	.50	3/8 x 2 7/8"	1/8"	5.25	1.75	.30	1/4 x 2 1/2
3/16"	14.15	4.70	.60	3/8 x 2 7/8"	5/32 "	6.00	2.00	.35	5/16 x 2 1/2
7/32"	15.75	5.25	.70	7/16 x 3"	3/16"	6.75	2.25	.35	5/16 x 2 1/2
1/4"	17.30	5.80	.75	7/16 x 3"	7/32 "	7.50	2.50	.40	3/8 x 2 5/8
5/16"	20.45	6.80	.85	1/2 x 3"	1/4"	8.25	2.75	.40	3/8 x 2 5/8
3/8"	25.20	8.40	.95	%6 x 3 1/4"	5/16"	9.75	3.25	.45	7/16 x 2 3/4
7/16"	28.35	9.45	1.15	5/8 x 3 1/4"	3/8"	12.00	4.00	.55	1/2 x 2 3/4
1/2"	34.65	11.55	1.35	5/8 x 3 1/4"	7/16" 1/2"	13.50 16.50	4.50 5.50	.65 .70	% x 2 % 5/8 x 3"

Sets of letters, sizes ½ through ¼ inch consist of 28 characters, including & and a period. Sets of letters, sizes ¾ through ½ inch consist of 27 characters, the period being omitted. Sets of figures consist of nine characters from 0 to 8, the 6 being used for the 9 Each set packed in a well made, nicely finished wooden box.

GRINDERS

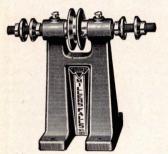


MILLERS FALLS
TOOLS
SINCE
1868



NO. 120 GRINDING HEAD

Fitted with "Oilite" Bronze Bearings



A stocky machine with a solid frame and ample base withstand years of service. The spindle is 1/2 inch in diameter and runs in two "Oilite" bronze bearings 11/4 inches long Bearings are lubricated through good sized spring top oiler

The spindle is threaded at both ends, 1/2 inch by 20 threa and carries two sets of steel flanges 11/4 inches in diameter to carry wheels up to 4 inches in diameter with a 34 inch fac and 1/2 inch hole. The V-belt steel pulley is 21/4 inches diameter. Designed to drive from above, behind or below

Frame nicely finished in glossy battleship gray. Flange and pulley nickel plated.

No. 120

Height 6"

Base 41/8 x 41/8"

Weight 5 1/4 lbs.

Code YEBAT \$4.0

Packed one in a box

NO. 125 GRINDING HEAD

Fitted with "Oilite" Bronze Bearings

Exactly the same as No. 120 above, but fitted with a clean, deep taper thread spindle in place of the wheel arbor on the left. This permits the use of buffing wheels and a great variety of wheels built on wood centers. On the right is a set of flanges and an all-steel three-jawed chuck that holds rods or drills from 0 to 3/8 inch in diameter. Height given is to center of spindle.

Weight Code Price each No. 125 6" 41/8 x 41/8" 53/4 lbs. YEBVO \$4.50 Packed one in a box





NO. 130 GRINDING HEAD

Fitted with "Oilite" Bronze Bearings

Exactly the same as No. 120 above, but with longer spindle on the right side. This is threader 1/2 inch by 20 thread and on it is mounted an all-stee chuck with three hardened jaws that hold 0 to 3/8 inch round shank drills or rods. Flanges, chuck and pulley nickel plated.

Base Weight 4 1/8 x 4 1/8" 5 1/2 lbs.

YECDY Packed one in a box

\$4.7



NO. 150 GRINDING HEAD

Fitted with "Oilite" Bronze Bearings



A heavier head with bigger base, greater height and ¾ inch spindle running in two "Oilite" bronze bearings 1½ inches long. The outboard portions of the spindle are turned down to ½ inch with 20 threads per inch. The bearings are oiled from two large spring top oil cups on the frame casting directly above the bearings. Arbor on either end of spindle with 1¾ inch flanges for holding wheels up to 6 inches or larger in diameter with 1 inch face and ½ inch hole. Flange nuts are hardened. The V-belt steel pulley is 2¼ inches in diameter and can be driven from above, behind or below.

Frame finished in glossy battleship gray enamel. Flanges and pulley nickel plated.

Height 7 1/2"

Base 5 x 5"

Weight

Code YEEVO Price each

Packed one in a box

NO. 155 GRINDING HEAD

Fitted with "Oilite" Bronze Bearings

Built on the same frame as No. 150. The spindle is ¾ inch in diameter and carries a deep, clean taper thread and a pair of wheel flanges on one end and a pair of flanges and chuck on the other.

The wheel flanges are 134 inches in diameter and hold wheels up to 6 inches or larger in diameter with 1 inch face and ½ inch hole. Hardened steel flange nuts. The chuck has three hardened steel jaws and holds 0 to 3/8 inch drills or rods. V-belt steel pulley is 21/4 inches in diameter and drives from above, behind or below.

Frame finished in glossy battleship gray enamel. Flanges, pulley and thuck nickel plated.

Height 7 ½"

No. 155

Base 5 x 5"

Weight 11 1/4 lbs. Code YEFEE Price each \$9.50

Packed one in a box



WIRE WHEEL BRUSHES



These wire wheel brushes are rigid and compactly made and have more wire per square inch of brush surface than the average wheel. Wires are tight compressed and give greater wearing strength to brush. They hav interchangeable bushings which slip into the 2 inch standard size opening

Arbor bushings can be furnished with $\frac{1}{2}$ inch, $\frac{5}{6}$ inch, $\frac{3}{4}$ inch or 1 incarbor hole.

It is important that the wanted diameter of the arbor hole be specified

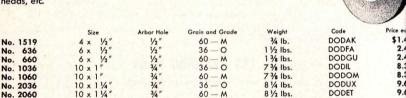


No. 24	4 x 1"	1 lb.	DOBME
No. 26	6 x 1 1/8"	1 3/4 lbs.	DOBNA
No. 28	8 x 1 ½"	2 3/4 lbs.	DOBPO
No. 210	10 x 2"	5 1/4 lbs.	DOBRI
No. 212	12 x 2 1/2"	6 1/8 lbs.	DOBSU
	Extra arbo	r hushings per pa	ir \$0.25

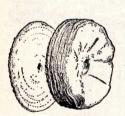
Packed one wheel in a box

GRINDING WHEELS

These are the best quality wheels made in the most commonly used grains and grades. Especially adapted for use on electric drills and grinders, grinding heads, etc.



Packed one wheel in a box BUFFING WHEELS



These buffing wheels will meet the need for light, portable buffers for polishing a number of different objects that have formerly necessitate hand work. The size of the wheel is 6 inches with a ½ inch hole to an arbor. Two sections of 20-ply are required to make the whe ½ inch thick.

	Weight	Code	
No. 1521	1/4 lb.	DOGAT	2-20 ply sections
No. 1721 Stitched	1/4 lb.	DOGON	2-20 ply sections
	Packed 2-20	nly sections in	an envelope

NO. 1522 CARBON REMOVING BRUSH

Very useful in removing carbon from cylinder heads, tops of pistons, valve ports, etc. Leaves fine burnished surface upon which it is hard for carbon to collect.

Diameter of brush, 1¼ inches. Length of wire, 1½ inches. Spindle, ¼ inch diameter. Can be used in any ¼ inch electric drill.

No. 1522

Weight 1/4 lb.

Code DOGUR

Packed one in a box



\$1.

\$ 3.2 5.0 6.1 11.2 13.4



broad assortment of accessories illustrated and described on the next three pages multiplies my times the utility and pleasure to be derived from a variety of power workshop tools.

ome are for use in the live or tailstock spindles of lathes, some on the taper arbors of drill presses d others on the shafts of motors or any driven shaft ½ or ½ inch in diameter, either plain round threaded ½ inch 20 thread. No. 986 can be used in the chuck of ¼ inch drills for driving grinding eels, wire or fibre brushes and buffing wheels. In the same way No. 992 can be used in an electric II for polishing and sanding.

aper shanks and sockets precision ground as are point centers. Parts hardened and tempered erever it is essential.

SPUR CENTERS



arp spurs and hardened points insure positive ve for hard or soft wood and other nontallic materials. Points are replaceable, irdened, precision ground Morse Taper Shanks.

	Shank	Diam. Head	Weight	Price each
920	No. 0 M.T.	1/2"	1 1/2 ozs.	\$0.80
922	No. 1 M.T.	7/8"	2 1/2 ozs.	.90
924	No. 2 M.T.	. 1"	5 1/2 ozs.	.95

SPUR CENTERS



arp, hardened points are replaceable. Four urs insure positive drive in hard and soft sood and non-metallic materials. Shanks accutely bored to fit ½ inch or 5/s inch round bors. Two set screws.

	Fits Arbor	Diam. Head	Weight	Price each
917	1/2"	3/4"	5 ozs.	\$1.00
918	5/8"	3/4"	5 ozs.	1.00

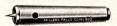
CROTCH CENTER



r centering round and square stock for drilling. curately milled 90° crotch. Precision ground orse Taper Shank.

	Shank	Diam. Head	Weight	Price each
. 938	No. 2 M.T.	2"	17 ozs.	\$1.60

CUP CENTERS



Deep machined cups with sharp rims. The keen, hardened points are replaceable. Precision around Morse Taper Shanks.

	Shank	Diam. Head	Weight	Price each
No. 910	No. 0 M.T.	1/2"	1 1/2 ozs.	\$0.75
No. 912	No. 1 M.T.	5/8"	2 1/2 ozs.	.80
No. 914	No. 2 M.T.	3/4"	5 1/2 ozs.	.95

CUP CENTERS



Sharp, hardened points are replaceable. Diameter of cups 1/2 inch. Shanks accurately bored to fit 1/2 inch and 1/2 inch round arbors.

	Fits Arbor	Diam. Head	Weight	Price each
No. 915	1/2"	5/8"	5 ozs.	\$1.00
No. 916	5/8"	5/8"	5 ozs.	1.00

SCREW FACE PLATES



For holding small blocks of non-metallic materials. Hardened screws. Plate 1¾ inches and 2 inches in diameter. Precision ground Morse Taper Shanks.

	Shank	Diam. Plate	Weight	Price each
No. 940	No. 1 M.T.	1 3/4"	5 ozs.	\$1.60
No. 942	No. 2 M.T.	2 "	11 ozs.	1.60



FACE PLATE

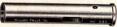


Heavy 1/2 inch plate, 3 inches in diameter bored so spurs can be set at two diameters. 113/16 inches or 27/16 inches. Center threaded for either the hardened point or screw center regularly Two hardened spurs also regular equipment. Back threaded to fit 3/4 inch-16T Arbor.

No. 926

Fits Arbor Diam Plate Weight 3/4"-16T 21 075 Price each \$2.00

TAPER ADAPTER



For adapting tools with No. 2 Morse Taper Shanks to drill presses with No. 33 Jacobs Arbors. An accurately bored No. 2 M.T. socket in one end and a No. 33 Jacobs Arbor in the other. Fine ground finish.

Weight Adapts Price each No. 982 No. 2 M. T. to No. 33J \$2.60 8 075

SHAPER CUTTER ADAPTER



For using shaper cutters with holes %6 inch in diameter with 18 threads. Hardened left-hand Shank accurately bored to fit a No. 33 Jacobs Arbor. Drift pin included.

For Cutters Fits Arbor Weight No. 980 %6"-18T No. 33 Jacobs 51/2 ozs.

SHAPER CUTTER ADAPTER



For shaper cutters with 1/2 inch holes. Maximum thickness of cutter 11/4 inches. Shank accurately bored to fit a No. 33 Jacobs Taper Arbor. Drift pin included.

Weight Price each For Cutters Fits Arbor No. 978 1/2" Hole No. 33 Jacobs 51/2 ozs. \$1.40

DRILL PAD



Face of pad accurately ground at right angle to the shank. Pad diameter 33/16 inches. Pro cision ground Morse Taper Shank. Weight

Shank

No. 960 No. 2 M.T. 3 3/16" 21 ozs.

MORSE TAPER ADAPTER SLEEVE



A precision ground No. 2 Morse Taper Shar with a No. 1 Morse Taper Socket accurate bored in it. Makes it possible to use No. Shanks in No. 2 Socket.

No. 1 to No. 2 M.T. No. 944

Weight \$1.4 3 1/2 ozs.

WHEEL ARBOR



For operating grinding and buffing wheel wire and fibre brushes, etc., with 1/2 inch hole Shank 1/4 inch in diameter can be used in ar three-jawed chuck of 1/4 inch or larger capacit Maximum distance between the 11/4 in flanges is 1 inch. Arbor threaded 1/2 inch-20 Weight Shank

SHAPER COLLARS

5 ozs.



Set consists of six collars for use on 1/2 inch shape spindles. Outside diameters 1/32, 3/4, 1, 1) 11/2 and 13/4 inches.

No. 976

No. 986

Fits Spindle

Weight 4 1/2 ozs. Price : \$2.0

\$0.6



60° POINT CENTERS



rdened, precision ground 60° centers with ecision ground Morse Taper Shanks for use tailstocks.

	Shank	Weight	Price each
928	No. 0 M.T.	1 1/2 ozs.	\$0.65
930	No. 1 M.T.	2 ozs.	.75
932	No. 2 M.T.	5 ozs.	.80

COLLET CHUCK



uck has ½ inch capacity and is regularly pplied with one ¼ inch collet. Shank is turately bored to fit a No. 33 Jacobs Taper oor. Drift pin for removal from arbor inded.

ucu.				
	Capacity	Fits Arbor	Weight	Price each
984	1/2"	No. 33 Jacobs	5 ozs.	\$1.50

WORK ARBORS



r operating grinding, polishing, wire brush, ffing wheels, sanding drums, etc., with $\frac{1}{2}$ inch es. Maximum capacity between the 2 inch uneter flanges is $2\frac{1}{4}$ inches. Spindle is $\frac{1}{2}$ inch diameter with 20 threads per inch. Shanks curately bored to fit round arbors. Two set ews.

	Fits Arbor	Weight	Price each
956	1/2"	11 ozs.	\$0.80
958	5/8"	12 ozs.	.80

CHUCKS WITH ROUND SOCKETS



ooth operating $\frac{1}{2}$ inch capacity chuck with ee hardened, spring activated jaws for Iding round shanks, drills and rods. Chuck cks threaded $\frac{1}{2}$ inch-20T. Sockets accurately red for round shanks.

	Chuck	Fits Arbor	Weight	Price each
970	0 to 1/2"	1/2"	16 ozs.	\$1.50
972	0 to 1/2"	5/8"	17 ozs.	1.50

60° BALL BEARING POINT CENTERS



Ball bearing 60° centers, hardened and precision ground concentric with the precision ground Morse Taper Shanks.

	Shank	Weight	Price each
No. 934	No. 1 M.T.	7 ozs.	\$3.20
No. 936	No. 2 M.T.	10 ozs.	3.20

COLLET CHUCKS



Made in two sizes, $\frac{1}{2}$ inch and $\frac{1}{2}$ inch respectively. Back threaded to fit an arbor $\frac{1}{2}$ inch in diameter with 20 threads.

	Capacity	Fits Arbor	Weight	Price each
No. 974	1/4"	1/2"-20T	3 1/2 ozs.	\$1.05
No. 990	1/2"	1/2"-20T	12 ozs.	1.30

DRILL CHUCKS



Finely knurled shells with three hardened, spring actuated jaws for holding all drills or rods within their capacity. Back threaded to fit on ½ inch-20 thread spindles. No. 968 is chrome plated and has a spanner wrench.

	Capacity	Fits Arbor	Weight	Price each
No. 988	0 to 1/4"	1/2"-20T	5 ozs.	\$0.55
No. 966	0 to 1/2"	1/2"-20T	11 ozs.	.90
No. 968	0 to 1/2"	1/2"-20T	12 ozs.	1.30

CHUCKS WITH MORSE TAPER SHANKS



A smooth-acting chuck with three hardened, spring activated jaws for holding round shanks, drills and rods from 0 to ½ inch in diameter. Precision ground Morse Taper Shanks.

	Chuck Capacity	Shanks	Weight	Price each
No. 962	0 to 1/2"	No. 1 M.T.	15 ozs.	\$2.20
No. 964	0 to 1/2"	No. 2 M.T.	18 ozs.	2.20



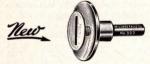
WORK ARBORS WITH CHUCKS



A useful combination of a 1/2 inch capacity threejawed chuck and an arbor for grinding wheels, buffs and brushes with 1/2 inch hole. Maximum distance between the 2 inch flanges is 21/4 inches with chuck removed, 5/8 inch with chuck closed. Chuck back threaded 1/2 inch-20T. accurately bored to fit round arbors.

Price each Fits Arbors Weight No. 946 1/2" 22 ozs. \$1.65 5/8" No. 948 21 ozs. 1.65

ABRASIVE DISC HOLDER



For driving paper and cloth abrasive discs for grinding, polishing and sanding. Anchor screw holds discs securely without protruding beyond the face of the disc. Has 1/4 inch round shank for use in three-jawed chucks.

Cap. Disc Shank Price each Weight \$0.70 1/4" Rd. 2 ozs. No. 992 4 to 6"

WORK ARBORS FOR MORSE TAPER SOCKETS



wheels, wire brushes, etc., with 1/2 inch hole Maximum capacity between the 2 inch dia eter flanges is 11/4 inches. Arbor thread Precision around Morse Tap 1/2 inch-20T. Shanks. Weight Shank

Work arbors accommodate grinding and buffi

No. 0 M.T. No. 950 \$1. OZS. No. 952 No. 1 M.T. 9 1/2 ozs. No. 954 No. 2 M.T. 12

ABRASIVE DISC HOLDER



Anchor screw holds 6 to 8 inch abrasive di securely for grinding, polishing and sandi operations. Shank accurately bored to fit

1/2 inch-20T threaded arbor. Cap. Disc Fits Arbor Weight Price e

1/2"-20T

5 ozs.

\$1.

6 to 8"

NOS. 88 and 89 TAP WRENCHES

No. 994



Designed for securely holding ta reamers, and other tools with squa shanks that must be operated by har The handles are permanently fixed the solid steel body. The chuck shell long and nicely knurled to provi powerful clamping action on the ca fully heat-treated steel jaws. Ja are self-opening.

Entire tool nicely polished.

No.	88		
No	89		

Hand Tap 1/16-1/4" 5/32-1/2"

Machine Tap 0-14 7-20

Handle 31/2" 41/2" Packed one in a box

Weight 3 1/2 ozs. 4 1/2 ozs.

Code YATPO YATYR

Price a \$0.



NOS. 10 to 12 TAP WRENCHES

ese tools are designed for accurately ntering and holding taps, reamers, all drills or other small tools. They are ovided with adjustable handles with all ends which may be slipped to the treme left or right when greater verage is desired or when the work in close quarters. The set screw, strated, locks the handle at any sired position. The chuck shells are ely knurled. The four jaws are carely hardened and tempered and the eve case hardened.



	Capaci	ties				
	Hand Tap	Machine Tap	Handle	Weight	Code	Price each
10	1/16-1/4"	0-14	3 1/4"	2 ozs.	NAVAL	\$1.00
11	1/16-9/32"	0-16	4 3/4"	4 ozs.	NAVEW	1.25
12	1/4-1/2"	14-20	51/4"	8 ozs.	NAVIC	1.80
112	Set of one each Nos. 10), 11 and 12		18 ozs.	NAVVY	4.30
	11 12	Hand Tap 10 16-1/4" 11 16-1/2" 12 14-1/2"	10 \\ \stack{16-1/4"} \\ \stack{11} \\ \stack{16-9/32"} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Hand Tap Machine Tap Handle 10 1/6-1/4" 0-14 3 1/4" 11 1/6-3/2" 0-16 4 3/4" 12 1/4-1/2" 14-20 5 1/4"	Capacities Handle Weight	Capacities

Nos. 10 and 11 packed six and No. 12 two in a box No. 112 one set in a box

NO. 3 HAND VISE

A powerful, efficient vise with a comfortable handle. Jaws and handles made of semi-steel. Jaw faces are nicely checked and provide a sure grip when tightened by means of the large steel thumb nut and screw bolt. The entire tool is nickel plated.

Width Jaws Weight Code Length 11/2" 1 lb. REAKS \$2.90 Packed one in a box

NO. 217 VISE



extremely handy vise for holding great variety of work on a bench Il or drill press bed or on the ork bench. The fixed and movable ws have parallel faces. A revable swivel jaw is also proled. Each base rail has two holes oped 3/8 inch-20 for fastening bed or bench. A hand screw for mping to a bed is provided. ws, sides, base and bearing faces accurately machined. All

. 217

ner faces black enameled. Clamp screw polished. Maximum Capacity

Width Jaws 2 3/8"

Weight 4 1/2 lbs.

Code DEIGN Price each \$6.20

3 1/8'

Packed one in a box



NOS. 663-664 BENCH VISES

Rigid Twin Guide Rod Construction

The twin guide rod construction of these vises was originated by Goodell-Pratt and marked a big advance in vise construction.

They are operated by an accurately cut-steel feed screw. Two steel guide rods are provided to insure rigidity. All parts are carefully fitted so that the jaws are easily operated, but without lost motion. After the vise is completely assembled, the jaws are machined so that they will meet accurately. Clamp to bench up to and including 2 inches thick.

All steel parts are polished and all iron parts are finished in black enamel.

No. 663 No. 664	Width Jaws 1 ½" 2 ½"	Jows Open 1 ½" 2 ½"	Weight 2 1/4 lbs. 8 lbs.	ZAGIT ZAGOV	\$2.80 5.20
		Packed o	ne in a box		





NOS. 161-1700 BENCH VISES

Rigid Twin Guide Rod Construction

These vises are similar to those above but not so fine a fine The twin guide rod construction insures smooth action or rigidity of the movable jaw. Jaws milled parallel after vise has been assembled. Small anvil on body casting. Board movable jaws black enameled. All exposed steel popolished. Clamp to bench up to and including 2 inches the

polished.	Clamp to	bench up	to and incl	uding 2 inc	nes th
	Width Jaws	Jaws Open	Weight	Code	Price e
No. 161	2 "	2 "	3 3/4 lbs.	YEGCA	\$2
No. 1700	21/2"	2 1/4"	4 lbs.	YEGLO	2
		Packed or	ne in a box		

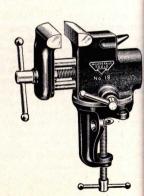
NO. 18 SWIVEL VISE

Swivel Base. Twin Guide Rods

This vise is similar to No. 1700 above with the addition of a swivel base which permits the jaws to be swung to any desired angle. The swivel clamping mechanism is controlled by a small steel level at the right. Twin guide rod construction gives smooth action and rigidity. Jaws 2½ inches wide are milled after vise is assembled for close fitting. Clamps to bench up to and including 2 inches thick.

Body finished in red enamel. Movable jaw in black enamel.

No. 18	Width Jaws 2 1/2"	Jaws Open 2 1/4"	Weight 5 3/8 lbs.	Code YEGMA	Price each \$3.80
		Desked and			





DRILL CHUCKS



Straight Round Shanks

chuck was originated by Goodell-Pratt over 40 years ago and has been supplied as regular ipment on millions of our hand and breast drills. It has been supplied in tremendous quantities nanufacturers as regular equipment on a wide variety of products. In every instance performance been highly satisfactory.

ade entirely of steel with carefully hardened and tempered jaws actuated by three small coil ngs. The shanks are carefully fitted to, and tested with, the chuck with which they are shipped. and the care used throughout manufacture accounts for the high standard of trueness maintained ne very moderate prices at which they are offered.

nese chucks can be easily tightened or loosened by hand. No spanner or wrench is required. The k shell is nicely knurled affording a positive and comfortable grip. The shanks are lathe ground in inch diameter. Shell, back and shank nicely polished.

	Capacity	Shell Diameter	Weight	Code	Price each
15	0 to 1/4"	1 "	3/8 lb.	WYNUS	\$2.10
151/2	0 to 3/8"	1 5/16"	5/8 lb.	WYPOS	2.60
16	0 to 1/2"	1 1/2"	7∕8 lb.	WYROV	3.40

Without Shanks

lese are the same chucks listed above but without shanks.

	Capacity	Back Threaded	Weight	Code	Price each
15	0 to 1/4"	7/6" (.443) 26NS	1/4 lb.	WEBAL	\$1.50
15 1/2	0 to 3/8"	15/32" (.467) 24NS	1/2 lb.	WEBEN	2.00
16	0 to 1/2"	%6" (.560) 24NS	5/8 lb.	WEBIT	2.60

CHUCKS WITH MORSE TAPER SHANK



se drill chucks are identical to those listed above but are fitted with precision ground, No. 1 No. 2, Morse Taper Shanks.

ordering, please be sure and specify size shank desired.

		W	eight		
	Capacity	No. 1 M.T.	No. 2 M.T.	Code	Price each
15 M.T.	0 to 1/4"	3/8 lb.	1/2 lb.	WYORV	\$3.10
15 ½M.T.	0 to 3/8"	5/8 lb.	3/4 lb.	WYRIT	3.70
16 M.T.	0 to 1/2"	₹ lb.	1 lb.	WYSET	4.80

Packed one in a box



MILLERS FALLS DRILL CHUCKS



These chucks have been used for years on Millers Falls Hand and Breast Drills, with complete satisfact to the user. They are fitted with or without plain round shanks and hold round shank drills within the capacity securely and with surprising accuracy for the low price at which they are sold. Manufacture interested in chucks in large quantities for equipment purposes are requested to ask for special, lar quantity prices.

They are made entirely of steel with three hardened jaws actuated by concealed springs the cannot be damaged from without. The shells are nicely knurled to give a good grip for tighteni and loosening.

The chucks listed below are regularly equipped with $\frac{1}{2}$ inch round shanks $\frac{2}{2}$ inches long.

	Capacity	Shell Diameter	Weight	Code	Price e
No. 5	0 to 1/4"	1 "	1/2 lb.	EARLY	\$2.
No. 6	0 to 3/8"	1 1/4"	3/4 lb.	EADEL	3.
No. 7	0 to 1/2"	1 1/2"	1 1/8 lbs.	EAGLE	4.
No. 7	0 to 1/2"	1 1/2"	1 1/8 lbs.	EAGLE	

Furnished with flattened shank for set screw without extra charge.

Without Shanks

These are the same chucks listed above but without shanks.

%6" (.432) 22NS %6" (.432) 22NS		EARSH EASTR	\$2.
7/4" (132) 22NS	1/- 11-	EACTO	•
	72 ID.	EASIK	2.
%6" (.560) 24NS	5/8 lb.	EAVES	3.
		%6" (.560) 24NS	/10 (1000) 2 1110

NO. 153 BREAST DRILL CHUCK



This chuck is interchangeable with the three-jawed chucks found on any Millers Falls or Goodell-Pr Breast Drill. It is of the Universal type holding 1/8 to 1/2 inch round shank drills, square bit brace sha or No. 1 Morse Taper Shanks.

Nicely polis	hed and knurled.				
	Capacity	Back Threaded	Weight	Code	Price e
No. 153	Universal	%6" (.560) 24NS	₹ lb.	DILAT	\$2.



HIGH SOURCE OF S

MILLERS FALLS
TOOLS
SINCE
1868



"BLU-MOL TENSIOMETER""

New



U. S. Patent 2,337,629, others pending
Applies Floating Tension to Blades in Operation

Tension always has been recognized as essential to the best performance of hack saw blades: how much tension was necessary for the best performance of a given size blade has been, in the parameter of pure guess. Naturally, therefore, a precise method or device for applying tension of many pounds per square inch was unknown.

In developing "BLU-MOL" and "JET-EDGE" Blades, which involved hundreds of exhaustive promance tests in which the importance of the right tension on any blade was found to be one of key factors to efficient performance, the Millers Falls Company determined to get the facts of produce a device that would apply the critical tension to a blade and maintain that tension continuous while the blade is in use.

The "BLU-MOL TENSIOMETER," a steel cylinder containing a heavy, precisely calibrated st spring, is the result. It is installed quickly and easily on any of the better known hack saw maching because it screws directly onto the blade holder in place of the original tightening nut. A gradual index shows at a glance the exact number of pounds tension on the blade as the Tensiometer is turn. It is equipped with a heavy, roller thrust bearing in its base so that tightening is extremely each preloading device is incorporated so that only a turn or two is required for any tension up 4,000 pounds.

In action the blade floats on the Tensiometer spring. By absorbing blade elongation caused frictional heat or distortion of the eyes, the initial tension is continuously maintained within very dlimits without attention from the operator. Blade life is greatly extended as any unusual shock strain on the blade is immediately absorbed by the spring thereby minimizing breakage which costly and at the same time adding a very worth-while safety factor.

With critical tensions worked out to a nicety and the "BLU-MOL TENSIOMETER" to apply the with, the overall efficiency of any hack saw blade can be greatly increased, the performance proved and large savings made.

"Millers Falls" and "Universal" Distributors will gladly furnish additional information about "float tension" and what it means to you and also arrange for a demonstration on your own machin without any obligation whatsoever. Write us for the name of the distributor nearest you.

For the proper tension on various sizes of blades see page 90.



HACK SAW BLADES

llers Falls Company manufactures the broadest and finest line of hack saw blades in the world. ery step in their production from the selection of the alloy steels from which they are made, the chining and setting of the teeth and particularly the heat treatment employs the most modern thods, equipment and controls. They are conceived and made as high grade cutting tools that st deliver superior performance under widely varying and, in many instances, adverse conditions.





They are made in two brands of identical quality under the trade names "Millers Falls" and "Unirsal." The two registered trademarks appear above.

No matter which brand a distributor may offer it can be accepted with confidence and the utmost surance that its performance cannot be excelled.

SELECTION OF HAND BLADES

nd blade performance depends very largely on the selection of the proper blade for the particular ting to be done. The proper type of blade and the number of teeth per inch or pitch deserve reful consideration.

pe of Blade — Cutting in drill rod, mild steels, non-ferrous metals and softer materials can be safely trusted to Tuf-Flex or Standard Steel Blades. When the cutting is in the hard alloy steels such as inganese, chrome-nickel, stainless, etc., a high speed type such as "Blu-Mol," "Blu-Flex" or "Tungsten gh Speed" should be chosen.

where of Teeth per inch — In general, coarse teeth should be used on large sections particularly len cutting mild steels, cast iron, non-ferrous metals and all softer materials where ample chip clearce is needed. When the sections are smaller a finer tooth should be used. The finest teeth should used in cutting very thin sections. The following table makes it quite simple to select the number teeth that will give the best performance on a variety of materials.

Pitch		Kind or Shape of Material				
Teeth	Large Sections Over 1" Diameters	Aluminum Angle Iron Asbestos Babbitt	Brass Bronze Cast Iron Channels	Copper Hard Rubber I Beams Mild Steel	Plastics Rail, etc.	
Teeth	Medium Sections Less than 1" Diameters	Alloy Steels Angle Iron	Armored Cable Cast Iron	Channels Drill Rod	Mild Steel Tool Steel	
Teeth	Thin Sections Less than 1/4" Diameters	Alloy Steels Angle Iron BX	Cable Conduit Channels	Heavy Sheets Pipe Tubing	Wire Rope	
! Teeth	Very Thin Sections	Angle Iron	Cable Channels	Gutter Pipe Mouldings	Pipe Tubing	

peration — A well built frame with an ample tensioning device and sufficiently rigid to keep the ade in good alignment is essential to prevent unnecessary blade breakage. If possible the work ould be held rigidly in a vise—if not it is advisable to use a flexible blade. Use care in starting e cut. Do not cut into a corner. Angle the starting cut so as to avoid any undue shock to a single oth. A light, steady stroke should be used until cut is well started, then use long, steady strokes with ficient pressure to keep the teeth cutting. Blades will wear out quickly if they are allowed to slip ter the cut or are dragged over it on the recovery stroke. Blades will last much longer if properly bricated when cutting all types of steel.



HAND HACK SAW DISPLAY UNITS

The three display units listed below, consisting of a display fixture and a very moderate quantity carefully balanced pitches of 10 and 12 inch blades, will increase the sales of hand hack saws ago and again. The display fixtures are entirely free. They are substantially made of wood a



pressed wood panels nicely finished and silk screened in the colors: one combination of colors for the new Blu-Flex Blade, of for Tuf-Flex and one for Blu-Mol. The list price of the comple unit is the standard list price of the blades only. These displayers less than one half square foot of counter space a will make it highly profitable.

New

NO. 550 TUF-FLEX UNIT

Super-Flexible Super-Tough Special Alloy

Display unit finished in red, black and gold. The assortment Tuf-Flex Blades (see following page) is as follows:

20 No. 53FH 10" — 18T	20 No. 55FH 12" — 18T
20 No. 63FH 10" - 24T	20 No. 65FH 12" — 24T
10 No 725H 10" 32T	10 No 75FH 12" - 32T

No. 550 Tuf-Flex Display Unit Complete

Packed one unit in a carton Weight 41/2 lbs.

NO. 1112 BLU-MOL UNIT

High Speed All Hard

Display unit finished in blue, red and gold. The assortment of Blu-Mol High Speed Blades (see page 91) is as follows:

10 No. 1018M 10" — 18T 10 No. 1024M 10" — 24T 5 No. 1032M 10" — 32T 10 No. 1232M 12" — 32T

No. 1112 Blu-Mol Display Unit Complete Packed one unit in a carton Weight 2½ lbs. \$17.60



\$8

\$17





NO. 2222 BLU-FLEX UNIT

High Speed Flexible

Display unit finished blue, black and gold. The assortm of Blu-Flex Blades (see next page) is as follows:

10 No. 1018BF 10" — 18T 10 No. 1024BF 10" — 24T 5 No. 1032BF 10" — 32T 10 No. 1224BF 12" — 24T 5 No. 1232BF 12" — 32T

No. 2222 Blu-Flex Display Unit Complete

Packed one unit in a carton Weight 21/2 lbs.

For ordering replacement stock for these displays see pages 89 and 91



STANDARD STEEL

STANDARD STEEL ALL HARD

h grade blades made of standard analysis of tungsten alloy steel with an exact and uniform at treatment which makes them economical to use in mild steels, non-ferrous metals, etc.

hey are made in two types: All Hard for work rigidly held, and Flexible for work away from the nch or in the hands of unskilled operators.

ide in Hand Sizes only			ALL HARD			Packed 100 in a bo		
				Order by N	umbers Below		Weight	List Price
th	Width	Thickness		Teeth	per inch		per box	per
			14	18	24	32	100	100
0	1/2	.025	RAP THE PARTY OF THE	13	23	33	3 5/8	\$8.00
2	1/2	.025	5A	15A	25A	35A	4 1/4	9.60
		Lynn L	L 1 10 10 10 10	FLEXIE	BLE	The Langue		
)	1/2	.025		53	63	73	3 5/8	\$8.00
2	1/2	.025	45A	55A	65A	75A	4 1/4	9.60
and	d 18T Blac	des Standard	Set. 24T an	d 32T Wavy Se	rt.			

"TUF-FLEX®" SPECIAL ALLOY

U. S. Patent No. 2,252.869 The finest of all general purpose saws

entirely new type of flexible saw made of a patented special alloy steel. It is super-flexible, per-tough-practically unbreakable in use. The teeth will not strip when cutting even the lightest ing, pipe or thinnest sheets.

cuts drill rod and alloy steels that ordinary flexible blades cannot master. It takes mild steels d non-ferrous metals in its stride. Packed 100 in a box Order by Numbers Below

de in Hand Sizes only

Thickness .025

.025

Width

1/2

1/2

	01001 07 110	mbers below		vv eight	LIST Price	
	Teeth per inch			per box	per	
14	18	24	32	100	100	
1 1 1 E	53FH	63FH	73FH	3 5/8	\$8.00	
5FH	55FH	65FH	75FH	4 1/4	9.60	
24T and	1 32T Wayy Set			Tare Selection	THE PERSON NAMED IN	

T and 18T Blades Standard Set.

"BLU-FLEX"" HIGH SPEED

Packed 100 in a box

11. A D. 1.

New Flexible, High Speed Blade

is remarkable new blade, made of fine quality, high speed molybdenum steel, cuts the cost of nd sawing hard alloy steels to the core and is so flexible that it is unbreakable in use. The high st of breakage is entirely eliminated and 100% of the cutting value of the blade is assured.

The unique heat treatment provides a hard cutting edge and a soft, tough back. Cutting performance equal in every way to an all hard blade.

	Width	Order by Numbers Below				Weight	List Price		
		Thickness	Thickness Teeth per inch		r inch		per box	per	
				14	18	24	32	100	100
	1/2	.025		1018BF	1024BF	1032BF	3 5/8	\$32.00	
	1/2	.025	1214BF	1218BF	1224BF	1232BF	41/2	38.40	

T and 18T Blades Standard Set. 24T and 32T Wavy Set.



SUGGESTIONS FOR SELECTION AND OPERATION POWER HACK SAWS

The selection and proper use of a power hack saw blade to cut the greatest amount of mate smoothly and accurately at the lowest cost involves a number of important factors all of which representation.

The length of the blade is, of course, determined by the size of the machine. Width and thick depend on the size of the machine, the size and shape of the sections being cut and the feed to used. The most efficient pitch—teeth per inch—depends on the kind of material being cut, its size shape. Use four and six teeth for production cutting of large to medium solid sections—the former softer, free-cutting materials where plenty of chip clearance is needed between teeth and the latence on harder materials. Use 10 teeth on very hard materials, small sections and structural shapes pipe. In sizes where available, 14 teeth are best for small solid sections or bars, light angle in pipe and tubing.

In operation the blade must be tensioned properly if it is to cut true and perform its best. The cut speed—strokes per minute—must take into consideration the kind of material being cut, the type blade chosen and production requirements. For proper feed—pressure on the blade—which va for different sizes and kinds of material and the size and type of blade used, the recommendat of the manufacturer of the machine should be followed.

For general recommendations of critical tensions, cutting speeds and pitches, follow the tables be or submit full details to us.

PITCHES AND SPEEDS FOR POWER HACK SAW BLADES

Material	Teeth per inch	Strokes per minute			Stro per m
Alloy Steel	4-6	60-90	High Speed Steels	4-6	60-9
Aluminum Alloys	4-6	100-125	Machinery Steel	4-6	12:
Aluminum, Pure	4-6	100-125	Malleable Iron	6-10	90-
Brass Castings, Soft	6-10	125-150	Manganese Bronze	6-10	60
Brass Castings, Hard	6-10	100-125	Nickel Chromium Alloys	6-10	60
Bronze Castings	6-10	100-125	Pipe, Iron	10-14	12.
Cast Iron	4-6-10	100-125	Rails	6-10	60-9
Copper	4-6	100-125	Stainless Steel	4-6	6
Carbon Tool Steel	6-10	90	Structural Steel	6-10	90-
Cold Rolled Steel	4-6	125	Tubing, Thick Wall	6-10	120
Die Blocks	4-6	60-90	Tubing, Thin Wall	14	120
Drill Rod	10-14	90			

Use cutting compound on all of the above materials except Cast Iron

TENSION IN POUNDS PER SQUARE INCH FOR POWER BLADES

The following table of correct tension for given sizes of blades was determined for Millers F by the Massachusetts Institute of Technology in conjunction with the development of Blu-Mol of Jet-Edge Blades and the Blu-Mol Tensiometer. See page 86 on "Floating Tension" and how it be applied.

Blade Width	Thickness	Blu-Mol Jet-Edge Tungsten High Speed	Blu-M Double
5/8"	.032	350 lbs.	
1 "	.049065	1500 lbs.	2100
11/4"	.065	2100 lbs.	2600
11/2"	.072	2600 lbs.	2800
2 "	.085100	3000 lbs.	3200
21/2"	.100	3500 lbs.	and the second



"BLU-MOL®" HIGH SPEED

Nol Blades, made from one of the finest high speed, molybdenum alloy steels, have earned an able reputation for low cost performance. The exact, closely controlled heat treatment gives a , abrasion resistant cutting edge that guarantees more cutting per blade than any blade of pe.

-Mol Blades cut fast and cut true. Their uniformly fine performance in both hard alloy and mild s and many other materials makes it the most economical blade for general, all purpose use. a blade that it pays well to become intimately acquainted with.



No.7506 M 17"X 14" X.065-6T

0

Superior High Speed Performance

D SIZES

Packed 100 in a box

	Thickness		Weight	List Price			
Width		A LAND TO THE REAL PROPERTY OF THE PARTY OF	Teeth	No. of The Land	per box	per	
		14	18	24	32	100	100
1/2	.025	THE PROPERTY	1018M	1024M	1032M	3 5/8	\$32.00
1/2	.025	1214M	1218M	1224M	1232M	4 1/4	38.40

and 18T Blades Standard Set. 24T and 32T Wavy Set.

ER SIZES

Packed 10 in a box

			Order by Numbers Below				Weight	List Price
Width	Thickness	4	6	Teeth per inch	14	18	per box 10	per blade
5/8	.032				1254M	1258M	7/8	\$0.64
1	.049				2414M		1 7/8	1.02
1	.065		A PROPERTY.	2410M			2 3/8	1.02
1	.049			1410M	4414M		21/4	1.19
1	.065			4410M			2 3/4	1.19
1 1/4	.065	4504M	4506M	4510M			31/2	1.49
1 1/2	.072	4604M	4606M				4 3/8	1.97
1	.049				7414M		2 3/4	1.45
1	.065			7410M			3 3/8	1.45
11/4	.065	7504M	7506M	7510M			4	1.81
1	.065	等的 经 压缩		8410M			31/2	1.53
11/4	.065	8504M	8506M	851GM			41/4	1.92
1 1/2	.072	8604M	8606M				51/2	2.53
2	.085	8884M	8886M				9 5/8	3.98
2	.085	1884M	1886M	See All Property	- TEVASTEE		101/4	4.65
2	.085	4884M	4886M				12 5/8	5.31
2 2	.100	4814M	25%4" Hole				141/2	6.12
21/2	.100	3114M	25/4" Hole	THE LAND			22 1/8	9.57

ss .032 inch have % inch holes, all blades .049 to .085 inch inclusive have % inch holes and all blades .100 inch have $^2\%$ inch holes.



"BLU-MOL®" DOUBLE-LIFE

This remarkable blade is highly recommended for use in any plant where hacksawing operations personnel are under careful supervision. Under such conditions it is capable of giving the lowest per cut of any blade made. It is showing large savings for the many metal working plants whave adopted it.

"Double-Life" is made of one solid piece of fine, high speed, molybdenum steel with teeth or both edges. The entire blade is painstakingly heat-treated to produce hard cutting edges, center is then electrically annealed by a special process to produce a softer, very tough zone entire length of the blade including the eyes, thus reducing breakage to a minimum.

The two cutting edges have a differential set. The first cut edge is set a few thousandths of inch wider than the second cut edge allowing the second cut edge to follow the kerf of the for without any wear.

"Double-Life" with its two cutting edges gives twice the cutting value of a single edge blade less than one third more.

BLU-MOL HIGH SPEED HOLVED BASE DOUBLE-LIFE	USE THIS EDGE FIRST	No. DL 1884 21"X2"X.085"-4T	
HACK DOUBLE-LIFE	111 USE THIS EDGE FIRST 111	21"X2"X.085"-4T	(

High Speed Double Edge

Made in Power Sizes	only	

New

Packed 10 in a

				Order by Nu	mbers Below		Weight	Pri pe bla
Length	Width	Thickness		Teeth p	er inch	11 K. 18 P.	box	
184	The state of	See F Misson	Tipe - 1 to be to	6	10	14	10	
12	1	.049				DL2414	2 1/2	\$1
12	1	.065			DL2410		2 1/8	1
14	1	.049		many and the		DL4414	23/4	
14	1	.065			DL4410		3 3/8	1
14	11/4	.065	DL4504	DL4506	DL4510		4 1/8	1
14	11/2	.072	DL4604	DL4606			.5	2
17	11/4	.065	DL7504	DL7506	DL7510		41/2	2
18	11/4	.065	DL8504	DL8506	DL8510		5	2
18	11/2	.072	DL8604	DL8606			63/8	3
18	2	.085	DL8884	DL8886			101/4	5
21	2	.085	DL1884	DL1886		The second	121/4	6
24	2 2	.085	DL4884	DL4886			141/4	6
24	2	.100	DL4814	2%4" Hole			16	7
DOM:				-				_

All blades .049 to .085 inch inclusive have 1/22 inch holes and all blades .100 inch thick have 21/44 inch holes.



"JET-EDGE"" POWER BLADES

ver in the thousands of tests to which "JET-EDGE" Blades have and are being subjected has a T-EDGE" Blade broken when operating at anything approaching normal speeds and feeds. This preakability, proved in industry as well as in our laboratory, is highly important. First it makes or hacksawing safer and secondly it insures getting the last cents worth of cutting value from every tide.

JET-EDGE" is the newest development and most sensational performer in the field. The cutting ge is a strip of super, high speed steel electrically welded to an extremely tough alloy steel back, a back absorbs the stresses and strains encountered in even the severest of operations and makes T-EDGE" unbreakable in use.

JET-EDGE" has already been standardized by some of the largest users of hack saw blades in country after exhaustive tests by their own production engineers. For safety, fast, clean cutting accuracy they cannot be equalled.



de in Power Sizes only

No. 8884JE 18"x 2"-.085 - 4T

0

Packed 10 in a box

Super, High Speed Unbreakable Blades New

16	III I OWE	olizes only		The same of the sa			racked i	o m a box
	Į.			Order by Nu	mbers Below		Weight	List Price
	Width	Thickness	March 1997	Teeth p	er inch		per box	per
		THE NEW YORK	4	6	10	14	10	blade
	1	.049				2414JE	2	\$1.20
	1	.065			2410JE		2 5/8	1.20
	1	.049	Sufficient Control		1410JE	4414JE	21/4	1.40
	1	.065			4410JE		3	1.40
	1 1/4	.065	4504JE	4506JE	4510JE		3 5/8	1.75
	1 1/2	.072	4604JE	4606JE			5	2.31
	1	.049	HUNCHE			7414JE	2 1/8	1.70
	1	.065			7410JE		31/2	1.70
	11/4	.065	7504JE	7506JE	7510JE		4 1/2	2.13
	1	.065			8410JE		3 5/8	1.80
	11/4	.065	8504JE	8506JE	8510JE		4 3/4	2.25
	1 1/2	.072	8604JE	8606JE			6	2.97
	2	.085	8884JE	8886JE			93/4	4.68
	2	.085	1884JE	1886JE		edic Ind	113/8	5.46
	2	.085	4884JE	4886JE			14	6.24
	2	.100	4814JE	25/4" Hole			151/4	7.20
	21/2	.100	3114JE	25%4" Hole			27 3/4	11.25

lades .049 to .085 inch inclusive have 32 inch holes and all blades .100 inch thick have 23/4 inch holes.



TUNGSTEN HIGH SPEED

The high speed steel from which these blades are made, a Tungsten 18-4-1 alloy, is particular efficient in cutting highly abrasive materials such as stainless steel, monel metal, carbon tool st chrome and chrome-nickel steels, etc.

With their well-known heat and wear resistant qualities they can be operated at normal fe and speeds in these materials cutting many square inches without undue dulling.

The keen teeth are precisely set. The hardness closely controlled and tested to assure unifor high accuracy of cut and long-cutting life.



No. 4604 14"x 1%"x .072"-4T

HAND	HAND SIZES							
				Order by N	umbers Below		Weight	Li Pri
Length	Width	Thickness	Teeth per inch				per box	p
Lengin			14	18	24	32	100	10
10	1/2	.025		1018	1024	1032	4	\$33
12	1/2	025	1214	1218	1224	1232	4 5/8	40

14T and 18T Blades Standard Set. 24T and 32T Wavy Set.

POWER SIZES

12

Packed 10 in a

10.5 4				Order by Nu	mbers Below		Weight	
Length	Width	Thickness	1	Teeth p	er inch		per box	
Lengin	Widin	Inickness	4	6	10	14	10	b
12	1	.049				2414	2	\$
12	1	.065		TVF TEN	2410	2.0	2 5/8	3
14	1	.049			1410	4414	21/8	
14	1	.065			4410		2 1/8	EAST 1
14	11/4	.065	4504	4506	4510		3 5/8	
14	1 1/2	.072	4604	4606		and the same	4 3/4	
17	1	.049			A MANAGER	7414	21/2	-
17	1	.065			7410		3 3/8	3
17	11/4	.065	7504	7506	7510		4 1/4	
18	24 66	.065		a Table St.	8410		3 5/8	
18	11/4	.065	8504	8506	8510		4 1/2	
18	11/2	.072	8604	8606			5 1/8	
18	2	.085	8884	8886			10	1
21	2	.085	1884	1886		50 S. S.	111/4	
24	2	.085	4884	4886		The second second	131/8	
24	2	.100	4814	25/4" Hole			153/8	

All blades .049 to .085 inch inclusive have 32 inch holes and all blades .100 inch thick have 23/4 inch holes.



"BLU-MOL"" HOLE SAWS

High Speed Heavy Duty "Follow through" Type

ese new and outstanding heavy duty, high speed hole saws are rugged gang cutting tools. They holes, fast and clean, ½ to 4½ inches in diameter and up to 1½ inch thick in any machinable iterial such as hard and mild steels, aluminum, brass and bronze, plastics, iron or steel pipe, wood, As the outside diameter of cut is slightly larger than the diameter of the body the saw follows inpletely through its own hole. This permits cutting through two or more walls or partitions.

the cutting edge is a specially selected high speed steel welded to a very tough alloy steel back lich in turn is welded to the steel body which receives the mandrel that drives it.

These saws, using mandrels No. 5518 and No. 5540, can be used in any portable power tool uipped with a ½ inch or larger chuck or can be used in radial drills, lathes, drill presses, etc.







CUTTING DEPTH 11/8"

LE SAWS

ALL SIZES - 6 TEETH PER INCH

Code: NOBAC

	Diameter	Price	Pip	e Sizes		Diameter	Price		e Sizes
ber	Saw	each	Pipe Tap	Pipe Entrance	Number	Saw	each	Pipe Tap	Pipe Entrance
0	5/8"	\$3.00		TO THE REAL PROPERTY.	542	2 5/8"	\$5.30	21/2	
2	3/4"	3.00		3/8	544	2 3/4"	5.30		
4	7/8"	3.00	3/4	3/8 1/2	546	2 1/8"	5.30		
	1 "	3.00	The The Park I		548	3"	5.30		21/2
R	1 1/8"	3.00	1	3/4	550	31/8"	5.30		
6 8 0	1 1/4"	3.00			552	3 1/4"	5.30	3	
2	1 3/8"	3.00		I.	554	3 3/8"	5.30		
4	1 1/2"	3.00	11/4		556	3 1/2"	5.30		
6	1 5/8"	3.00			558	3 5/8"	7.00		3
	1 3/4 "	4.00	1 1/2	11/4	560	3 3/4"	8.00	31/2	
n	1 7/8"	4.00			562	3 1/8"	8.50		
8 0 2 3 4	2"	4.00		11/2	564	4"	9.00		
3	21/16"	5.30			566	4 1/8"	10.00		31/2
4	2 1/8"	5.30			568	4 1/4"	13.00		
	2 1/4"	5.30	2		570	4 3/8"	15.50		
R	2 3/8"	5.30			572	4 1/2"	18.00		4
6 8 0	21/2"	5.30		2					Carlot Lav.

MANDRELS WITH HIGH SPEED PILOT DRILLS

The four mandrels listed below for driving the No. 500 Series of Hole Saws are all equipped th ¼ inch high speed pilot drills. A 12-inch extension is available.

	Fitting Saws	Shank	Weight	Code	Price each
. 5514	Nos. 510-518	1/4" Rd.	1/4 lb.	NOCAL	\$2.50
. 5518	Nos. 510-518	7/16" Hex	1/4 lb.	NOCET	4.00
5540	Nos. 520-572	7/16" Hex	5/8 lb.	NODIM	6.00
5572	Nos. 520-572	5/8" Hex	3/4 lb.	NOFOX	6.00
	12" Extension	7/16" Hex	₹ lb.	NOGUN	4.00
tra High Spee		/16 TIEX	78.10.	NOGYS	1.50

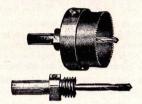
Packed one Saw, Mandrel or Extension in a box



HIGH SPEED HOLE SAWS











Saw

Replaceable Saws and Drills

With a cutting edge or blade made of the finest molybdenum high speed steel hardened and tempere for fast cutting in the hardest alloy steels or any other machinable material. Originally develope for the use of automotive mechanics, steamfitters, plumbers, millwrights and electricians they are finding many cost saving applications on construction jobs and in industry.

They can be taken to the job since they are readily driven by any portable power tool with $\frac{1}{2}$ inch or larger chuck, or they can be used in a drill press, lathe and some other machine tools.

The saw or blade is rigidly locked in the body or cup by means of an expansion bolt. The assemble cup and saw is driven by a mandrel which screws into the top of the cup. The mandrel also hold and drives a pilot drill which enters the work ahead of the saw at the desired center of the hole to be cut. Knockout springs are supplied on mandrels of sizes ¾ to 3½ inches inclusive, to facilitate removal of the plug cutout. Larger sizes have knockout holes in the top of the cup.

Saws and pilot drills can be replaced quickly and easily at very small cost when worn out. The cups and mandrels can be used indefinitely making this the most economical saw of its type available.

CUTTING DEPTH % INCH

Code: LUBE

Price each

-									A Samuel of the same of the sa				
Size Inches	Cup No.	and Saw Price	Saw No.	Only Price	For Pipe Tap Size	For Pipe Entrance Size	Size Inches	Cup No.	and Saw Price	Sav No.	w Only Price	For Pipe Tap Size	
3/4	12	\$1.80	012	\$0.90		3/8	21/2	40	\$2.70	040	\$1.80	Y-AT	2
7/8	14	1.80	014	.90	3/4	1/2	25/8	42	2.70	042	1.80		_
15/16	15	1.80	015	.90			2 3/4	44	2.70	044	1.80	- / -	
1	16	1.80	016	.90			2 1/8	46	2.70	046	1.80		
1 1/16	17	1.80	017	.90			3	48	2.70	048	1.80		2 1/2
11/8	18	1.80	018	.90	1	3/4	31/8	50	2.70	050	1.80		- 1
11/4	20	1.80	020	.90		H. There	31/4	52	2.70	052	1.80	3	
1 3/8	22	1.80	022	.90		1	3 3/8	54	2.70	054	1.80		
11/2	24	1.80	024	.90	11/4		31/2	56	2.70	056	1.80		
1 5/8	26	2.20	026	1.30			3 5/8	58	3.10	058	1.85		3
1 3/4	28	2.20	028	1.30	1 1/2	1 1/4	4	64	3.40	064	2.15		
1 1/8	30	2.20	030	1.30			41/8	66	3.40	066	2.15		3 1/2
2	32	2.20	032	1.30		11/2	4 1/4	68	3.40	068	2.15		
2 1/16	33	2.20	033	1.30			4 3/4	76	4.30	076	2.45	4 1/2	
21/8	34	2.70	034	1.80			51/8	82	4.60	082	2.75		
21/4	36	2.70	036	1.80	2		5 5/8	90	4.95	090	3.10		
2 3/8	38	2.70	038	1.80		1313563							

MANDRELS WITH PILOT DRILLS

	Weight	Code
No. 1218 for sizes Nos. 12 to 18	1/4 lb.	LUDAM
No. 2054 for sizes Nos. 20 to 56	1/2 lb.	LUDET
No. 5890 for sizes Nos. 58 to 90	1/2 lb.	LUDIZ
Extra Pilot Drills		LUDOR

Packed one Saw, one Cup and Saw or one Mandrel in a box



FLEXIBLE BACK METAL CUTTING BAND SAWS

FLEXIBLE BACK
REGULAR TOOTH





For Straight, Contour or Profile Sawing

ade of tough alloy steel with a carefully hardened cutting edge and a softer, tough flexible back.

They cut fast and are long-lived. Careful selection of the type, pitch and cutting speed is essential

to the best performance and economy.

Two types of teeth are available. "Regular" for ferrous metals—"Skip Tooth" for non-fe<mark>rrous</mark> etals, wood, plastics, fibres, etc.

GULAR TOOTH

In Coils (100', 250' or 500') or Cut to Length

dth .	Thickness	Teeth per inch	List Price per foot	Welds each
14	.025	24-32	\$0.12	\$0.60
2	.025	18- 32	.12	.60
	.025	14 -18-24	.12	.60
,	.025	10 - 14 -18-24-32	.12	.60
	.025	10 -12 -14 -18-24-32	.12	.60
4	.025	8-10 - 14 -18-24	.128	.60
8	.025	6- 10*- 14*-18-24	.136	.60
	.032	8-10*- 14*-18-24	.168	.60
4	.032	6-8-10*-12*-14*-18	.192	.60
	035	6-8-10*- 14	.24	.60

6 to 24 pitch saws have Raker Set—32 pitch have Wavy Set only. Pitches marked with asterisk are available in Wavy Set also.

CIP TOOTH

In Coils (100', 250' or 500') or Cut to Length

dth hes	Thickness	Teeth per inch	List Price per foot	Welds each
	.025	4-6	\$0.12	\$0.60
	.025	3-4	.128	.60
	.025	3-4	.136	.60
4	.032	3	.192	.60
	.035	2-3	.24	.60

GULAR OR SKIP TOOTH

Cut to Length and Welded

lnclusive	.025	.025	.025	.032	.032	.035
5' 6" to 6' 5"	\$1.32	\$1.37	\$1.42	\$1.61	\$1.75	\$2.04
6' 6" to 7' 5"	1.44	1.50	1.55	1.78	1.94	2.28
7' 6" to 8' 5"	1.56	1.62	1.69	1.94	2.14	2.52
8' 6" to 9' 5"	1.68	1.75	1.82	2.11	2.33	2.76
9' 6" to 10' 5"	1.80	1.88	1.96	2.28	2.52	3.00
0' 6" to 11' 5"	1.92	2.01	2.10	2.45	2.71	3.24
1'6" to 12'5"	2.04	2.14	2.23	2.62	2.90	3.48
2' 6" to 13' 5"	2.16	2.26	2.37	2.78	3.10	3.72
3' 6" to 14' 5"	2.28	2.39	2.50	2.95	3.29	3.96
4' 6" to 15' 5"	2.40	2.52	2.64	3.12	3.48	4.20
5' 6" to 16' 5"	2.52	2.65	2.78	3.29	3.67	4.44
6' 6" to 17' 5"	2.64	2.78	2.91	3.46	3.86	4.68
7' 6" to 18' 5"	2.76	2.90	3.05	3.62	4.06	4.92
8' 6" to 19' 5"	2.88	3.03	3.18	3.79	4.25	5.16
9' 6" to 20' 5"	3.00	3.16	3.32	3.96	4.44	5.40
0' 6" to 21' 5"	3 12	3.29	3.46	4.13	4.63	5.64



SPRING TEMPER METAL CUTTING BAND SAWS

MILLERS FALLS SPRING TEMPER

This type of saw is made of the finest quality spring tempered steel which can readily to resharpened and reset.

Their applications for economical use should not be confused with those of the hard edge, flexib back type on the preceding page. They are recommended for cutting aluminum, magnesium, brathin metal sheets, plastics, fibre and similar materials.

In Coils (100' or up to 1000') or Cut to Length

Width inches	Thickness	Teeth per inch	List Price per foot	We
1/4	.025	8-10	\$0.14	\$0.5
3/8	.025	8-10	.15	40.0
3/8	.032	8-10	.16	
1/2	.025	6-8-10	.17	
1/2	.032	6-8-10	.18	5
5/8	.025	4-6-8-10	.18	6
5/8	.032	4-6-8-10	.20	.6
5/8	.035	4-6-8-10	.21	.6
3/4	.035	4-6-8	.23	.6
1	.035	4-6-8	.28	.6
11/4	.042	3-4	.35	7
11/4	.049	3-4	.38	.7

Deduct \$0.04 per foot if neither filed nor set; deduct \$0.0125 per foot if filed and not set; deduct \$0.0275 per foot if set and not filed.

Cut to Length and Welded

Lengths Inclusive	.025	3% " .025	36" .032	.025	.032	%″ .025	% " .032	5% " .035	.035	.035	11/4 "	11/2
5' 6" to 6' 5"	\$1.34	\$1.40	\$1.46	\$1.52	\$1.58	\$1.68	\$1.80		\$1.98			\$2.9
6' 6" to 7' 5"	1.48	1.55	1.62	1.69	1.76	1.86	2.00	2.07	2.21	2.56	3.15	3.3
7' 6" to 8' 5"	1.62	1.70	1.78	1.86	1.94	2.04	2.20	2.28	2.44	2.84	3.50	3.7
8' 6" to 9' 5"	1.76	1.85	1.94	2.03	2.12	2.22	2.40	2.49	2.67	3.12	3.85	4.1
9' 6" to 10' 5"	1.90	2.00	2.10	2.20	2.30	2.40	2.60	2.70	2.90	3.40	4.20	4.5
10' 6" to 11' 5"	2.04	2.15	2.26	2.37	2.48	2.58	2.80	2.91	3.13	3.68	4.55	4.8
11' 6" to 12' 5"	2.18	2.30	2.42	2.54	2.66	2.76	3.00	3.12	3.36	3.96	4.90	5.2
12' 6" to 13' 5"	2.32	2.45	2.58	2.71	2.84	2.94	3.20	3.33	3.59	4.24	5.25	5.6
13' 6" to 14' 5"	2.46	2.60	2.74	2.88	3.02	3.12	3.40	3.54	3.82	4.52	5.60	6.0
14' 6" to 15' 5"	2.60	2.75	2.90	3.05	3.20	3.30	3.60	3.75	4.05	4.80	5.95	6.4
15' 6" to 16' 5"	2.74	2.90	3.06	3.22	3.38	3.48	3.80	3.96	4.28	5.08	6.30	6.7
16' 6" to 17' 5"	2.88	3.05	3.22	3.39	3.56	3.66	4.00	4.17	4.51	5.36	6.65	7.1
17' 6" to 18' 5"	3.02	3.20	3.38	3.56	3.74	3.84	4.20	4.38	4.74	5.64	7.00	7.5
18' 6" to 19' 5"	3.16	3.35	3.54	3.73	3.92	4.02	4.40	4.59	4.97	5.92	7.35	7.9
19' 6" to 20' 5"	3.30	3.50	3.70	3.90	4.10	4.20	4.60	4.80	5.20	6.20	7.70	8.3
20' 6" to 21' 5"	3.44	3.65	3.86	4.07	4.28	4.38	4.80	5.01	5.43	6.48	8.05	8.6

HACKSAW FRAMES





NO. 84 HACK SAW FRAME



The Finest Frame Ever Made

The frame is made of fine quality steel 3/6 inch thick by 13/6 inch wide and the back is hard, tou steel 1/16 inch thick. The rear portion of the frame, stamped from 3/16 inch steel, affords a rigid supp for the handle and a guard that gives complete protection to the hand. The handle is made unbreakable, transparent red "Tenite" comfortably shaped and checked to afford a good grip.

Easily adjustable for 8 to 12 inch blades which are held by sturdy studs with heavy pins set clips that permit facing the blade in four directions. Any desired tension on the blade can be secur by turning up the large wing nut at the rear. Equipped with a Millers Falls "Blu-Mol" High Spe Hack Saw Blade. Beautifully polished, heavily nickel plated and buffed throughout.

Capacity Depth No. 84 8-12 3 1/4"

3/16 x 13/16"

Weight 1 lb. 15 ozs.

Code IGOTU

\$4.

Packed one in a box

NO. 48 HACK SAW FRAME



For design, serviceability and price appeal in the higher quality field this frame has never beapproached. Its unusual rigidity and fine balance, combined with its finely polished, nickel plated as buffed finish, are sure to make it one of the year's best sellers. The fully guarded handle is made of unbreakable, black "Tenite." It is nicely checked to afford a comfortable, sure grip. Adjustab for 8 to 12 inch blades. Equipped with one 10 inch blade.

No. 48

Capacity 8-12

Depth 31/4"

Stock 3/16 x 11/16"

Weight 1 3/4 lbs.

Code INPAR

Price e \$2.8

Packed one in a box



NO. 300 HACK SAW FRAME



New

ne new lever tensioning device with which this fine new frame is equipped supplies more tension it less effort, easier and quicker blade changing, more accurate cutting and more cutting value from very blade. Tension is released by pulling down the lever that hugs the bottom of the frame below the handle. It is instantly restored after the blade has been changed and the lever snapped back to the normal position.

The heavy duty frame is very rigid insuring lasting alignment of the blade. It is made of $\frac{3}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and the back is stamped $\frac{1}{16} \times \frac{3}{4}$ incheel and $\frac{1}{16} \times \frac{3}{4} \times \frac{3}{4}$ incheel and $\frac{1}{16} \times \frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ incheel and $\frac{1}{16} \times \frac{3}{4} \times \frac{3}{$

The handle is made of tough, unbreakable, red "Tenite" molded on in one piece. It gives a sure, omfortable grip. The frame has an unusually pleasing balance. Quickly adjustable for 10 or 12 inch lades which may be faced in any of four directions.

All exposed metal parts beautifully polished, nickeled and buffed. A 10 inch Millers Falls "Tuf-Flex" pecial Alloy, Flexible Blade is supplied with each frame.

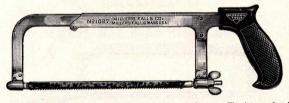
lo. 300 10-12

Capacity 10-12" Throat 3 1/8"

Stock 3/16 x 3/4" Weight 2 lbs. Code IBYOR Price each \$3.50

Packed one in a box

NO. 1027 HACK SAW FRAME



A fine quality frame that appeals instantly to the tool-wise purchaser. The heavy back reinforcement extends down the entire length of the molded black pistol grip handle making it practically unbreakable. The hang is excellent. Adjustable for 8 to 12 inch blades which can be faced in four directions. Equipped with one 10 inch blade. Finely polished, nickel plated and buffed.

No. 1027

Capacity 8-12" Depth 3 1/4"

Stock 3/16 x 11/16"

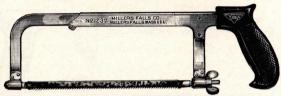
1 3/4 lbs.

Code ICHNO Price each \$2.10

Packed two in a box



NO. 1237 HACK SAW FRAME



A substantial and serviceable frame with specially reinforced back and fitted with the popular bla molded pistol grip handle with metal reinforcement its entire length. Easily adjustable for 8 to 12 in blades which can be faced in four directions. Equipped with one 10 inch blade.

All exposed metal parts nickel plated.

Depth Capacity No. 1237 8-12" 3 1/4"

Stock 3/16 x 11/16"

Weight 1 3/4 lbs.

Code INVER Price e \$1.

Packed two in a box

NO. 99 HACK SAW FRAME



A serviceable frame offered at a very attractive price. The handle is made of black composition reinforced its entire length, knurled and shaped to give a sure, comfortable grip. The balance excellent. The frame construction is substantial and permits ample tension on the blade by med of a wing nut. Blade can be faced four ways. Equipped with one 10 inch hack saw blade. Quid and positively adjustable for 8 to 12 inch blades.

All exposed metal parts nickel plated.

No. 99

Capacity 8-12

Depth 2 3/4

Stock 5/32 x 11/16"

Weight 1 1/8 lbs.

Code INNOT Price e \$1.

Packed two in a box

NO. 1934B HACK SAW FRAME





A sturdy, rigid frame built specially to meet Federal Specifications. It is easily adjustable for 8 12 inch blades which can be faced in any of four directions. Ample tension is secured by the wing on the outer stud. Finished in black "Ebonite" finish with the handle of mahogany lacquered hardwood

No blade furnished with this frame.

No. 1934B

Capacity 8-12"

Depth 3"

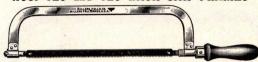
Stock 3/16 x 11/16" Packed two in a box

Weight 1 1/8 lbs.

Code **ICORT** Price e \$1.



NOS. 125 and 126 HACK SAW FRAMES



ell made, non-adjustable frames, low price. Made for 10 and 12 inch blades which may be faced any one of four directions. Blade tension secured by turning the straight, mahogany finished,

ardwood	nandle. One	blade furnished	with each frame.	All exposed me	etal parts nicke	el platea.
Res Park	Capacity	Depth	Stock	Weight	Code	Price each
o. 125	10"	31/8"	3/16 x 11/16"	1 lb.	IMBED	\$1.05
o. 126	12"	31/8"	3/16 x 11/16"	1 1/4 lbs.	IMBUE	1.20
			Packed two in a box			

NO. 515A HEAVY DUTY HACK SAW FRAME

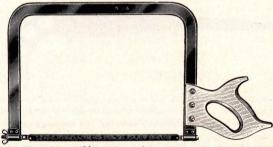


ade for extra heavy cutting of large rods, bars, rails, structural shapes, etc. The heavy backs have nooth, even bends. Ample blade tension is secured by turning the large wing nut on the outer stud. ades can be faced in four directions. One 12 inch blade furnished with each frame, Attractively hished in black enamel with a mahogany finished hardwood handle.

Capacity Depth Stock Weight Code Price each 51/4" 1/4 x 1" \$2.95 . 515A 12" 2 lbs. ILIAC

Packed one in a box

NO. 24 RAIL SAW



heavy duty frame with a deep 101/4 inch throat for cutting steel rails and large structural shapes. andles are selected hardwood shaped to give a sure, comfortable grip. The large wing nut gives nple tension on the blade which can be faced in four directions. One 12 inch blade furnished. cely black enameled with handle in natural lacquered finish.

Capacity Depth Stock 1014"

. 24

12"

1/4 x 1" Packed one in a box

Weight 3 5/8 lbs. Code

ILECK

Price each \$3.50



NO. 1723 HACK SAW FRAME



A serviceable, all-metal frame adjustable for 8 to 12 inch blades. Pressed steel pistol grip hand checked to give a good, sure grip. Blades can be faced four ways. Thumb nut provides amp tension on blade. One 10 inch blade furnished with each frame. Entire frame nickel plated.

No. 1723

Capacity 8-12"

Depth 31/4

Stock 3/16 x 11/16"

Weight 1 1/2 lbs. Code \$1.

IMPEL

Packed two in a box

NO. 168 HACK SAW FRAME



Frame well constructed throughout and fitted with an indestructible all-metal pistol grip handle. adjustable for 8 to 12 inch blades which may be faced in any of four directions. Thumb nut provid Entire tool well nickeled. Equipped with one 10 inch blade.

No. 168

Capacity 8-12"

Depth 2 3/4"

Stock 5/32 x 11/16" Weight

Code

\$1.

Packed two in a box

11/3 lbs.

INROT

NO. 237 KEYHOLE HACK SAW



The new handle with which this famous little tool is now equipped will make it more popular than even It gives a surer grip and better control. It is nicely finished in red and black enamel.

The blade with 18 teeth per inch has carefully hardened and tempered teeth and a soft flexib back which minimizes breakage. It cuts nails, metal lath, plaster board, stucco, armored cab conduit, packing, bone, bakelite, fibre, hard and soft wood, etc., etc. It can be used in countless place where the ordinary hack saw will not operate.

Length Blade No. 237 51/2"

Length Overall 91/2"

Weight 4 ozs.

Code YEYAT

\$0. Price d

No. 7 No. 8 Extra Blades 18 Tooth Extra Blades 24 Tooth

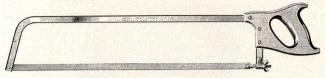
YEYGA

YEYDB

Packed six complete saws or one dozen blades in a box



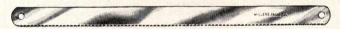
NO. 320 BUTCHER SAW FRAMES



rdy, well balanced frames, well built throughout for long satisfactory service. The frame is made nicely finished ¼ by ¾ inch round edge steel. Each frame is equipped with a high quality ¾ inching tempered saw blade tensioned by means of a large wing nut operating on the rear stud. The infortably shaped hardwood handle has a natural lacquered finish. Frame and parts nickel plated.

	Length	Depth	Stock	Weight	Code	Price each
320	18"	5"	1/4 x 3/4"	1 1/8 lbs.	YILIX	\$2.00
320	22"	5"	1/4 x 3/4"	2 1/8 lbs.	YILLA	2.20
320	24"	5"	1/4 x 3/4"	2 3/8 lbs.	YILKO	2.30
			Packed two in a b	xoc		

NO. 420 BUTCHER SAW BLADES



de from the finest quality of spring steel, 5% inch wide, tempered, ground and polished. The teeth set and filed after setting, making a very free, fast-cutting blade. Ends are rounded and punched

engin.	Length	Width	Weight, Box	Code	Price doz.
420	18"	5/8"	5 lbs. 5 ozs.	YOJKO	\$2.00
420	22*	5/8"	6 lbs. 3 ozs	YOJLE	2.40
420	24"	5/8"	7 lbs.	AMLOY	2.55
		Packed o	ne-half gross in a box		

NO. 83 KITCHEN SAW



well made, serviceable saw for use in the home for cutting green bone and frozen meat. The frame nade of $\frac{1}{16}$ by $\frac{1}{12}$ inch round edge steel. The handle is made of selected hardwood with a natural quer finish.

ach frame is equipped with a polished and tempered blade, $\frac{1}{2}$ inch wide, which is filed and set fast, free cutting.

Code Price each Length Blade Stock Weight 14" YASIR \$1.00 3/16 x 1/2" 1/8 lb 83 Price doz YASFA \$1.65 Extra Blades 14" 1/2 lb. per doz.

Packed six frames in a box; six dozen blades in a box



BUTCHER SAW BLADES IN COILS



These coils are made of one continuous strip of the finest quality, spring tempered steel with a brig ground and polished finish. Blue finish can be supplied, if desired. The teeth are set and then fi after setting, making them exceptionally sharp and ready for immediate use. The teeth are corresponded and pitched — 11 teeth per inch — for free, easy cutting. They can be readily refiled with the proper equipment.

Supplied in either 25 or 50 foot coils put up in a box from which they are easily dispensed in desired lengths.

desired leng	JIIIS.					
	Length	Width	Teeth	Weight	Code	Price per
No. 251	25'	5/8"	11	1 1/4 lbs.	YIALM	\$3. 3. 7
No. 252	25'	3/4"	11	1 3/4 lbs.	YIANP	3.
No. 311	50'	5/8"	11	2 1/2 lbs.	YIJUP	7
No. 312	50'	3/4"	11	3 1/2 lbs.	YIKAL	7
			Parked one coil	in a hox		

NO. 200 BUTCHER SAW PUNCH

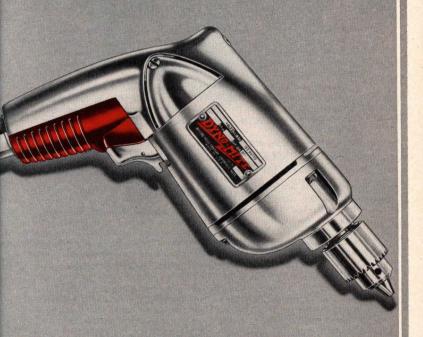


There is so much variation in the sizes of various styles of butcher's saw frames that most of the bet class of butcher's saw blades or coils are not punched when they leave the factory. All dealers in, a users of, these blades will find this inexpensive device very convenient for punching the necessary hol

The frame is made of black enameled, malleable iron. The screw and crossbar are polished ste The punch and die are made from fine tool steel carefully hardened and tempered to punch spring ste

No. 200 11/4" 53/4" 7 ozs. YEMAJ \$1.

ELECTRIC



MILLERS FALLS
TOOLS

SINCE
1868



MILLERS FALLS PORTABLE ELECTRIC TOOLS

GENERAL UTILITY LINE

With this catalog we announce the first of a complete line of utility tools and accessories produced to meet the particular requirements of the individual tool user, such as, home owners, carpenters, farmers, model and pattern makers, hobbyists and a host of others who need power tools for intermittent use, at reasonable prices.

There are no finer tools in this class than the new $\frac{1}{4}$ inch and $\frac{1}{2}$ inch drills and stands listed on pages 110 and 111. They are attractive in appearance and are finished to reflect their fine construction throughout. Their power is conservatively rated giving a reserve safety factor not found in other comparable drills.

These tools will be distributed through the hardware jobbing trade and afford a satisfactory spread for the jobber and dealer alike.

Discounts to the trade will be quoted on request.

STANDARD INDUSTRIAL LINE

The regular line of Millers Falls Electric Tools, long and favorably known for their fine performance and dependability, is designed and engineered throughout for production use in industry and in the automotive, plumbing, heating, construction, electrical and many other fields. The wide range of capacities, speeds and power now available answer most every requirement encountered. New tools in development will make the line even more attractive as an outstanding merchandising opportunity.

It is sold, on a selective basis, through recognized distributors and Millers Falls Co. will welcome the opportunity of discussing a distributorship with any qualified concern. Our policy and effective co-operation are liberal and fair in every detail and should lead to a mutually satisfactory association.

Write for complete electric tool catalog and further particulars.

SERVICE STATIONS

More than thirty strategically located service stations are available in the United States and Canada for the repair or reconditioning of Millers Falls Electric Tools. They carry complete stocks of parts and have the equipment and skilled personnel to render unusually prompt-and efficient service.



GENERAL PURPOSE BENCH GRINDER



New

For Grinding, Wire Brushing and Buffing

fine, new grinder that is rugged, powerful and reliable. The design of both the mechanical and etrical parts is excellent and the performance is comparable to that of much higher priced grinders. It is nicely suited for a great variety of "touch up" jobs in industry and the requirements of auto-

t is nicely suited for a great variety of "fouch up" jobs in industry and the requirements of autotive, plumbing and heating, electrical or other types of repair shops. It is equally valuable to me workshop owners, farmers and craftsmen in general.

The heavy $14\frac{1}{2}$ inch spindle runs on large, grease sealed, precision ball bearings. Greater tance between the motor housing and the wheels gives increased accessibility and a wider flexibility use particularly on brushing, polishing and buffing. The heavy, wider wheel guards are mounted eatly on the spindle housing. The work rests are easily adjustable.

VERALL HEIGHT: 91/2 inches. Bench to center of spindle 5 13/16 inches.

OTOR: Powerful 1/4 H.P. for 50/60 cycle A.C. only. 115 or 230 volts.

NDLE: Ball bearing. Overall length 14 1/2 inches.

HEELS: One each coarse and fine, high grade abrasive.

PRD: Six feet of high quality, three conductor with plug.

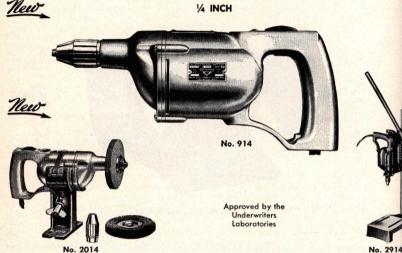
Wheels No Load R.P.M. Shipping weight Code Price each Rating 6 x 1/2 x 1/2" 45 NILUR \$39.50 60 1/4 H.P. 3450 lbs. 3.00 867 Plain Eye Shields, per pair 1 5/8 lbs. DORPA 3 1/4 lbs. DOSSY 7.50 8610 Illuminated Eye Shields, each DUBAX 23.00 7600 Cast Floor Pedestal, each

For Grinding and Wire Brush Wheels, see pages 76 and 126



GENERAL UTILITY DRILL

1/4 INCH



A truly wonderful 1/4 inch drill developed with the sole objective of giving the individual craftsma a better drill than ever available before at such a low price.

It is a smooth running, powerful, sturdily built tool to meet the particular requirements of home owners, farmers, cabinet makers, carpenters, model and pattern makers, hobbyists and a gree variety of light maintenance and repair shops. The pleasing lines, light weight and excellent balance are a promise of the long, dependable service it will deliver and which all tool-wise mechanics count of from a Millers Falls Tool.

A number of interesting attachments with accessories for use in this drill are in development an will be announced shortly. Sanding, grinding, buffing and wire brushing are among the operation that can be performed.

MOTOR: Universal for D.C. or A.C. - 25 to 60 cycles - 115 and 220/230 volts.

HOUSING: Die cast aluminum alloy. Hammered grey enamel finish.

CHUCK: New Millers Falls Precision. GEARS: Alloy steel — grease lubricated.

BEARINGS: Ball thrust spindle — all others oil impregnated bronze.

SWITCH: Single pole — make and break.

CORD: Seven feet of two conductor, Type SJ, with moulded rubber reinforcement and plug.

War f	Capacity in Steel	No Load R.P.M.	Amps. Full Load	Length overa	ıll Weight	Code	Price ed
No. 914	1/4"	2500	2	111/2"	3 ½ lbs.	PANON	\$19.8
No. 2014	Wheel Arbor for Bench Stand, Base Bench Stand				2 lbs. To be announced	PARAR PAREB PAREM	1.0 3.0

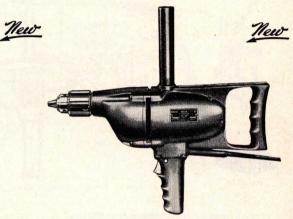


GENERAL UTILITY DRILL

1/2 INCH



No. 2912



No. 912

Approved by the Underwriters Laboratories

The Best Dollar Value of any Drill Made

r the craftsman whose work requires a drill of ½ inch capacity this tool offers a remarkable value. has more power, finer construction, better performance and less weight than any comparable drill the market. It is ruggedly built, amply powered and heavily insulated.

OTOR: Universal for D.C. or A.C. -25 to 60 cycles -115 and 220/230 volts.

DUSING: Die cast aluminum alloy Fine hammered grey enamel finish.

HUCK: No. 33B Jacobs Standard key-operated.

APACITY: ½ inch in steel — ¾ inch in hard wood.

ARS: Alloy steel — grease lubricated.

ARINGS: Ball thrust spindle bearing — all others oil impregnated bronze.

VITCH: Double pole with lock — automatic trigger release.

ORD: Three conductor, Type SJ, cord with moulded rubber reinforcements and plug cap with grounding terminal connector.

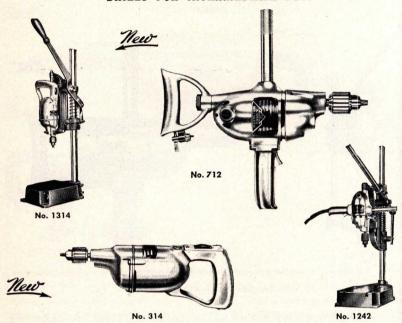
	Capacity in Steel	No Load R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price each
. 912	1/2"	450	3	15"	8 lbs.	PANNA	\$35.00

BENCH STAND

	For Drill No.	Max. Chuck to Table	Max. Chuck to Column	Max. feed	Weight	Code	Price each
. 2912	912	14"	51/4"	31/2"	26 lbs.	PARAB	\$16.80



DRILLS FOR INTERMEDIATE DUTY



These two beautifully designed and engineered drills are built to a high standard to meet it requirements for a $\frac{1}{4}$ inch and $\frac{1}{2}$ inch drill for intermediate service on maintenance and repair job On the work for which they are intended they can be depended on for smooth, uninterrupted performance.

MOTORS: Universal for D.C. or A.C. — 25 to 60 cycles.

VOLTAGES: 115, 125, 150, 230 or 250.

CHUCK: Jacobs key-operated. GEARS: Heat-treated alloy steel. BEARINGS: Ball thrust spindle—all others oil impregnated bronze.

SWITCH: Fully enclosed. Double pole.

CORD: Ten feet of high quality, three conductor with unbreakable plug.

	Capacity in Steel	No Load R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price e
No. 314	1/4"	1800	2.2	12"	4 ½ lbs.	DAMOY	\$25.0
No. 712	1/2"	400	3.5	15½"	10 ½ lbs.	DYNET	41.0

BENCH STANDS

For Drill No.	Max Chuck to Table	Max. Chuck to Column	Max feed	Weight	Code	Price e
314	131/2"	5"	21/2"	25 lbs.	DYNUT	\$11.
712	191/2"	71/2"	4 1/2"	77 lbs.	DYREX	27.
	Drill No.	Drill No. to Table 314 13½"	Drill No. to Table to Column 314 13 ½" 5"	Drill No. to Table to Column Max feed 314 131/2" 5" 21/2"	Drill No. to Table to Column Max feed Weight 314 131/2" 5" 21/2" 25 lbs.	Drill No. to Table to Column Max feed Weight Code 314 13½" 5" 2½" 25 lbs. DYNUT



"DYNO-MITE"" PRODUCTION DRILLS



s new, improved line of "Dyno-Mite" drills has been augmented by the addition of a high torque del equipped with a 3/8 inch chuck nicely adapted to the airplane and many other industries. The tors are more powerful; finer materials used and fabrication held within the closest tolerances. yno-Mite" drills are efficient, highly dependable production tools.

to. 220, 1600 R.P.M. is recommended for general service in steel, while the high speed models ideal for drilling small diameter holes in non-ferrous metals with minimum burr. The slower speed, h torque models are recommended for stainless and the hard alloy steels up to 1/16 inch and full ck capacity in non-ferrous metals.

TOR: Universal D.C. or A.C. - 25 to 60 cycles. VOLTAGES: 115, 125, 220/230, 250.

USING: Die cast aluminum, fine grey enamel finish.

UCK: Jacobs key-operated.

ARINGS: Armature, intermediate gears and spindle, grease sealed, ball bearing.

ARS: Heat-treated alloy steel throughout.

ITCH: Double pole, with lock, automatic trigger release.

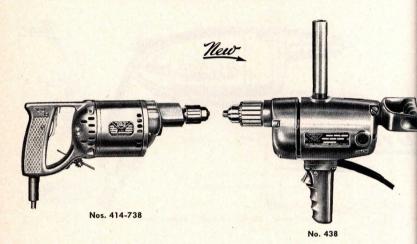
RD and PLUG: Ten feet of three conductor heavy duty cord with plug.

		C	apacity	No Load Speed					
	Chuck	Steel	Non-Ferrous	R.P.M.	Length overall	Wei	ght	Code	Price each
220	1/4"	1/4"	1/4"	1600	8 7/8"	3	lbs.	DARAT	\$38.00
225	1/4"	3/16"	1/4"	2500	8 7/8"	3	lbs.	DAREL	38.00
230	1/4"	5/32"	1/4"	3500	8 7/8"	3	lbs.	DAREX	38.00
235	1/4"	1/8"	1/4"	5000	8 7/8"	3	lbs.	DARID	38.00
240	5/16"	5/16"	5/16"	800	9 5/8"	3 1/2	lbs.	DAROW	44.00
245	5/16"	5/16"	5/16"	500	9 5/8"	3 1/2	lbs.	DAROF	44.00
250	3/8"	5/16"	3/8"	800	101/8"	4	lbs.	DARRO	46.00
255	3/8"	5/16"	3/8"	500	101/8"	4	lbs.	DARYS	46.00
				for Nos. 220, 2		240 and	1245	DETRO	30.00

113



ELECTRIC DRILLS



These are industrial drills of the highest order. They have been used on every sort of application and found tried and true. Constant improvement and refinement of their electrical units and precision machining of all vital metal parts insures the long life and dependable service for withey are famous.

The new No. 438 replaces the No. 538 in response to a growing demand for a close coupl heavy duty drill of % inch capacity. It is one of the finest tools ever produced.

MOTORS: Universal for D.C. or A.C.— 25 to 60 cycles — 115, 220/230 and 250 volts.

CHUCKS: Jacobs key-operated.

GEARS, PINIONS and SPINDLES: Finest heat-treated alloy steel.

BEARINGS: Nos. 414 to 738 ball bearing armature with bronze spindle bearings. No. 438 ball bearing armature and spindle. All others needle roller.

BRUSHES: Long life pigtail — accessible from without.

SWITCHES: Double pole, fully enclosed. Underwriter approved.

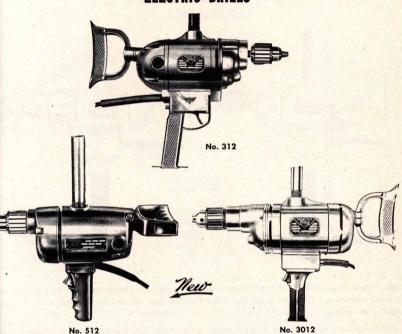
CORD: Ten feet of best rubber covered three conductor, Type S, with unbreakable plug.

	Capacity in Steel	Standard No Load R.P.M.	Special No Load R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price
No. 414	1/4" Std.	1800	3000	2.5	12"	5 1/8 lbs.	DIANA	\$40
No. 514	1/4" H.D.	2000	1000-1500-3000	3.0	14"	7 lbs.	DRAWL	50
No. 516	5/16" H.D.	1500	2000	3.0	14"	7 3/8 lbs.	DROVE	52
No. 638	3/8" Spl.	1000	1500	3.0	14"	7 5/8 lbs.	DINOX	53
No. 738	3/8" H.D.	400	None	3.0	14"	8 3/4 lbs.	DAHOV	53
No. 438	3/8" H.D.	900	None	4.5	14"	9 1/2 lbs.	DINNO	58
							According to the same	

Special speeds as above \$2.50 extra. For Stands and other Accessories see pages 117 and 126.



ELECTRIC DRILLS



he requirements for drills with $\frac{1}{2}$ inch capacity are completely covered by these three fine tools. hey are rugged and powerful and built up to the high standards set for all Millers Falls Tools.

The addition of the new No. 512 answers the demand for a compact unit for use in close quarters or by operators who prefer this type of design for general use.

MOTORS: Universal for D.C. or A.C.— 25 to 60 cycles — 115, 220/230 and 250 volts.

CHUCKS: Jacobs key-operated.
SEARS, PINIONS and SPINDLES: Finest heat-treated alloy steel.

EARINGS: No. 312 ball bearing armature. Spindle bronze sleeve with ball thrust bearing. All others bronze

No. 512 ball bearing armature and spindle. All others needle roller.

No. 3012 ball bearing armature and spindle. All others bronze sleeve.

RUSHES: Long life pigtail — accessible from without.

WITCHES: Double pole, fully enclosed. Underwriter approved.

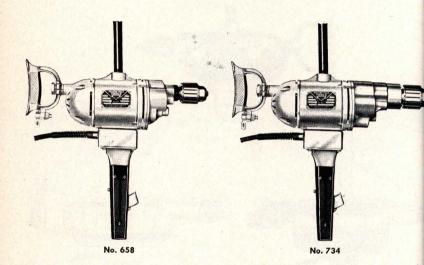
ORD: Ten feet of best rubber covered, Type S, three conductor with unbreakable plug.

	Capacity in Steel	No Load R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price each
lo. 312	1/2" Std.	525	4.5	17"	15 3/8 lbs.	DIRCK	\$58.00
No. 512	1/2" Std.	550	5.0	14"	9 1/2 lbs.	DIRIL	58.00
No. 3012	1/2" H.D.	650	5.5	18"	19 lbs.	DIRYL	75.00

For Stands and Accessories see pages 117 and 126



ELECTRIC DRILLS



Each of these rugged, heavy duty drills is available in two speeds which completely cover requirement in these capacities. They are perfectly suited for such jobs as driving pipe-threading machine positive set cylinder grinders and hones and similar applications.

The spindles of Nos. 734 and 801 are mounted on Timken Taper Roller Bearings, otherwise the drills have precision ball bearings throughout.

MOTORS: Universal for D.C. or A.C.—25 to 60 cycles — 115, 220/230 and 250 volts.

CHUCKS: Jacobs key-operated. No. 801 has No. 3 M.T. Socket.

BEARINGS: Ball bearing armatures; Nos. 734 and 801 Timken Roller Bearing.

GEARS, PINIONS and SPINDLES: Heat-treated alloy steel.

SWITCHES: H.D. double pole, fully enclosed. Underwriter approved.

BRUSHES: Pigtail — mounted on rocker ring.

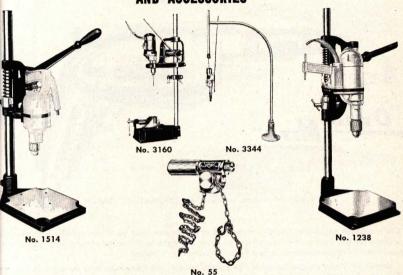
CORD and PLUG: Ten feet best rubber covered, Type S, three conductor with armored plug.

	Capacity in Steel	No Load R.P.M.	Special R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price ec
No. 658	5/8" H.D.	475	700	6.5	191/4"	22 13/16 lbs.	DOTTY	\$ 92.0
No. 734	3/4" H.D.	400	275	7.5	213/4"	26 3/8 lbs.	DANDY	105.0
No. 801	1 " Std.	275	400	7.5	23 1/4"	24 1/4 lbs.	DROXO	120.0
				-	The second secon	1000000000	The state of the s	

Special Speeds, \$2.50 extra. For Stands and Accessories see pages 117 and 126.



DRILL AND SCREW DRIVER STANDS AND ACCESSORIES



e well-built stands listed below make efficient bench units of the Millers Falls Drills and Screw Drivers which they are designed. The bases are large enough for stability and afford ample support to be heavy columns which carry the adjustable brackets that hold the tool. The feed levers with spring turn provide ample drilling pressure or feed for driving screws or running nuts.

No. 3344 Goose Neck Stand provides spring suspension hand feed only.

	For Drills and/or Screw Drivers	Max. Chuck to Table	Chuck to Column	Max. feed	Base	Weight	Code	Price each
. 1238	414, 514, 516, 638, 11 and 22 312, 3012, 658, 734 and 801 414, 514, 516, 638, 11 and 22	16 "	73/4"	4 1/4" 3 " 2 7/8"	5 x 2 3/8" 10 x 10" 9 1/4 x 8" 11 1/4 x 6 1/4"	37 lbs.	DUCKE DIWAC DIACK DIAGO	
. 3344			71/2"	51/2"	4½ x 2″ 8¼ x 8¼″	7 lbs. 2 lbs.	DAPIR DUCLO DIWEL	5.00 3.50 26.00

Switch Controls and Limit Switches available for vertical stands

ACCESSORIES

	Accessory	For use with Stands and/or Drills Nos.	· w	eight	Code	Price each
. 1511	Wall Brackets	1238, 1242, 1514 and 5120	2!	/a lbs.	DAMEZ	\$ 2.00
. 1517	Drill Vise (2 3/8 x 3")	All vertical stands	7	lbs.	DIFTS	4.50
. 3163	Foot Treadle Feed	1238, 1242, 1514, 3160 and 5120	20	lbs.	DAPAT	8.00
55	Power Feed	All drills with pipe side handles	3	lbs.	DRULO	19.95



"DYNO-MITE®" PRODUCTION SCREW DRIVERS



On production assemblies where a myriad of screws or nuts must be driven rapidly, with nicety uniform torque, thousands of manufacturers know and insist on the velvet smooth, vibrationless acand sensitive adjustability of Millers Falls "Adjustomatic" Clutches.

Driven by the new, more powerful "Dyno-Mite" power unit these tools have no equal in their fit They handle machine screw and wood screw applications within their capacity efficiently, dependent and with accelerated production.

The 1600 R.P.M. unit is recommended for general all around use. The 500 and 800 R.P.M. htorque units are recommended for all sheet metal screws, self-tapping screws and wood screws hard wood. The 2500 R.P.M. unit is recommended for running nuts on long studs and simapplications.

Regular equipment consists of one each, bit and centering sleeve, for Nos. 6, 8 and 10 screand a clutch-adjusting spanner.

MOTOR: Universal D.C. or A.C.— 25 to 60 cycles. VOLTAGES: 115, 125, 220/230, 250.

CLUTCH: Patented "Adjustomatic" roller, selective torque.

BEARINGS: Ball bearing throughout. GEARS: Heat-treated alloy steel.

SWITCH: Double pole, with lock — automatic trigger release.

CHUCK: Quick change 1/4" Hex.

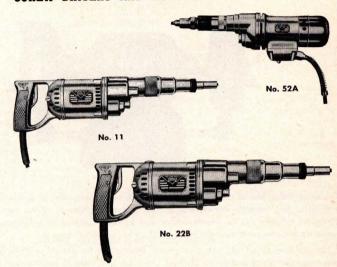
CORD and PLUG: Ten feet of three conductor heavy duty cord with plug.

Capacity		No Load Speed				
Mach. screws	Wood screws	R.P.M.	Length overall	Net weight	Code	Price
1/4"	#10 — 1 1/4"	1600	121/4"	3 3/4 lbs.	DUGAN	\$66
#10	#10 - 11/4"	2500	121/4"	3 3/4 lbs.	DUHET	66
1/4"	#12 - 11/2"	800	125/8"	4 lbs.	DUIRO	66
1/4"	#12 - 11/2"	500	12 5/8"	4 lbs.	DUJAR	66
Universal 25°	Angle Attachment				DELRY	15
					DEIGO	30
	Mach. screws 1/4" #10 1/4" 1/4" Universal 25°	Mach. screws Wood screws \foatin \frac{y}{y}	Mach. screws Wood screws R.P.M. 1/4" #10 — 1 1/4" 1600 #10 #10 — 1 1/4" 2500 1/4" #12 — 1 1/2" 800	Mach. screws Wood screws R.P.M. Length overall ¼" #10 — 1 ¼" 1600 12 ¼" #10 #10 — 1 ¼" 2500 12 ¼" ¼" #12 — 1 ½" 800 12 ½" ¼" #12 — 1 ½" 500 12 ½" Universal 25° Angle Attachment	Mach. screws Wood screws R.P.M. Length overall Net weight ¼" #10 — 1 ¼" 1600 12 ¼" 3 ¾ lbs. #10 #10 — 1 ¼" 2500 12 ¼" 3 ¾ lbs. ¼" #12 — 1 ½" 800 12 ½" 4 lbs. ¼" #12 — 1 ½" 500 12 ½" 4 lbs. Universal 25° Angle Attachment 4 lbs. 4 lbs. 4 lbs.	Mach. screws Wood screws R.P.M. Length overall Net weight Code ¼" #10 — 1 ¼" 1600 12 ¼" 3 ¾ lbs. DUGAN #10 #10 — 1 ½" 2500 12 ½" 3 ¾ lbs. DUHET ¼" #12 — 1 ½" 800 12 ½" 4 lbs. DUIRO ¼" #12 — 1 ½" 500 12 ½" 4 lbs. DUJAR Universal 25° Angle Attachment DELRY

Complete assortment of Bits and Sockets for any application available. See page 117 for Nos. 3160 and 33 Stands for bench operation of these drivers. Units equipped with reversing switches, \$7.50 extra.



SCREW DRIVERS AND NUT RUNNERS



e screw drivers and nut runners on this and the preceding page with the diversity of speeds provided d power available will handle any application within their rated capacities. Above all they are articularly valuable where sensitivity and uniformity of set are highly important.

The services of a corps of highly trained and experienced sales engineers are available to survey our requirements and make recommendations as to the most efficient units to use and, when necessary, ork out special fixtures to secure the desired results at a high rate of production.

The "Adjustomatic" Clutch is the smoothest acting, most easily adjusted and sensitive device of its nd. No other clutch equals its performance. It's exclusive on Millers Falls Tools.

OTORS: Universal for D.C. or A.C.— 25 to 60 cycles — 115, 220/230 and 250 volts.

UTCHES: Nos. 50A, 52A and 22B "Adjustomatic" selective torque. No. 11 adjustable double action.

ARS, PINIONS and SPINDLES: Heat-treated alloy steel.

ARINGS: Armature and main spindle ball bearing. Intermediate spindle bearings bronze sleeve. QUIPMENT: Nos. 50A and 52A — Bits and sleeves for Nos. 6, 8 and 10 Screws. No. 11 two bits and sleeves for Nos. 8 and 12 Screws. No. 22B two bits and sleeves for Nos. 12 and 16 Screws. Complete range of bits, sleeves and sockets available for all numbers.

VITCHES: Double pole, fully enclosed.

No. 50A

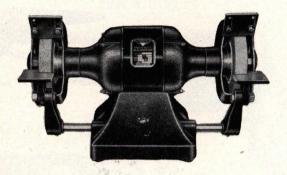
DRD: Ten feet of best rubber covered, Type S, three conductor with unbreakable plug.

	Capacity Wood Screws	Capacity Mach. Screws	STANDARD N. L. Speed R.P.M.	SPECIAL N. L. Speed R.P.M.	Amps. Full Load	Length overall	Weight	Code	Price each
. 50A	#10 — 1 1/2"	#12	800	\$ 1200 2000	1.2	121/2"	4 3/8 lbs.	DEMUN	\$68.00
o. 52A o. 11 o. 22B	#10 — 1 ½" #16 — 2" #20 — 2 ½"	#12 3/8" 3/8"	800 500 500	3000 700-1000 700-1000		12½" 16½" 18½"	4 % lbs. 7 lbs. 9 % lbs.	DENIG DELLA DELIB	62.00 78.00 92.00

Reversing switches, installed, \$5.00 extra. No extra charge for special speed. For Stands, see page 117



HEAVY DUTY BENCH GRINDERS



This dependable line of grinders is equipped with new super-powered, precision-balanced motor with extra fast capacitor starting with starting current requirements of less than 15 amperes an continuous induction run for steady, heavy duty service. Oversize, labyrinth sealed ball bearing insure trouble-free performance.

The new knee action tool rests give greater adjustability for straight or angle grinding. Heavie safer, enclosed wheel guards are supplied. They are also wider to accommodate wire brush wheel

One coarse and one fine, high grade abrasive wheel regular equipment.

	H.P.	Voltages	Wheels	No Load R.P.M.	Weight	Code	Price ea
No. 76	1/3	110; 125; 150; 220; 250 50/60 cycle 1 phase	6 x 3/4 x 1/2"	3450	55 lbs.	NIBAC	\$ 54.5
No. 76	1/3	220/230 or 400/440 50/60 cycle 3 phase	6 x 3/4 x 1/2"	3450	55 lbs.	NIBEL	54.5
No. 76	1/3	115; 230 or 250 D.C.	6 x 3/4 x 1/2"	3450	60 lbs.	NIBUS	65.0
No. 77	1/2	110; 125; 150; 220; 250 50/60 cycle 1 phase	7 x 1 x 5/8"	3450	80 lbs.	NIDAR	78.0
No. 77	1/2	220/230 or 400/440 50/60 cycle 3 phase	7 x 1 x 5/8"	3450	80 lbs.	NIDEB	78.0
No. 77	1/2	115; 230 or 250 D.C.	7 x 1 x 5/8"	3450	90 lbs.	NIDUG	90.0
No. 81	1	110 1 phase 50/60 cycle	10 x 1 x 3/4"	1725	155 lbs.	NIKAS	120.0
No. 81	1	220 or 440 3 phase 50/60 cycle	10 x 1 x 3/4"	1725	155 lbs.	NIKED	120.0
No. 81	1	550 3 phase 50/60 cycle	10 x 1 x 3/4"	1725	155 lbs.	NIKOP	126.0
ASSESSMENT OF THE PARTY OF THE							THE R. P. LEWIS CO., LANSING, MICH.

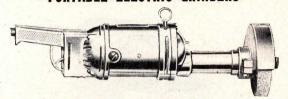
Single phase grinders are equipped with heavy duty switch and 10 feet of rubber covered cord. Three phase grinders are equipped with a heavy duty switch but no cord.

Nos. 76 and 77 can be supplied with heavy steel guards at slight additional cost.

For Grinding and Wire Brush Wheels, see pages 76 and 126.



PORTABLE ELECTRIC GRINDERS



signed throughout and powered for heavy duty snagging, grinding welds, wire brushing, removing t, scale and grinding off rivets, pins, bolts and similar operations. Totally enclosed motors exclude rious dust and arit.

DTORS: Universal for D.C. or A.C.— 25 to 60 cycles — 115, 220/230 and 250 volts.

ARS, PINIONS and Spindles: Heat-treated alloy steel

ARINGS: Oversize ball bearings throughout SWITCHES: Double pole, fully enclosed. IEELS: No 406B. High grade 6 x 1 x 5/8" No. 461 Bakelite bonded 6 x 1 x 5/8"

RD: Ten feet of rubber covered, Type S, three conductor with armored plug.

	Diameter wheel	N.L. Speed R.P.M	Amps. Full Load	Length	Weight	Code	Price each
. 406E	6"	3700	6.0	23 1/2"	23 11/16 lbs.	TRUMP	\$110.00
. 461	6"	5500	6.0	23 1/2"	23 5/8 lbs.	TRUYT	110.00
Extra	Wheels, No. 406	B, \$3.75, N	o. 461, Bonded,	\$5 00 each.	Other accessorie	s, see pages 76	and 117

HIGH SPEED HAND GRINDER





light, compact tool essential in every toolroom or die shop for grınding clearances, shrinkage rrections, contouring, grinding cavities, profiling, etc. Motor and spindle housing made of tough bulded Bakelite making a cool tool easily operated with one hand

OTORS: Universal D C or A.C.— 25 to 60 cycles — 115, 220/230 and 250 volts

IUCKING CAPACITY Collets \(\frac{3}{20} \)" to \(\frac{3}{4} \)" dometer

OUPMENT: Three wheel extensions, \(\frac{4}{6} \) arbor, \(\frac{3}{6} \)" collet chuck; \(\frac{3}{6} \)" chuck arbor, \(\frac{3}{6} \)" extension arbor \(1\frac{1}{4} \times \frac{1}{4} \times \fr

DRD: Ten feet of best rubber covered, Type SJ, three conductor with plug N.L Speed

	R.P.M	overall	Weight	Code	Price each
. 306B	18,000	11"	2 3/4 lbs.	TRUTH	\$40.00
. 6030		No. 6131 Milling Machine	Adapter for 34, 1. 1 1/2	" Spindles \$1.50	2.00
s. 1524	3/22" 1529 1/8" and 15	25 /4" Collets			2.00

ACCESSORIES FOR BENCH GRINDERS

	Fitting	Weight	Code	Price each
Plain Shatterproof Eve Shields	All	1 5/8 lbs.	DORPA	Pair \$ 3.00
	All	3 1/4 lbs.	DOSSY	7.50
	60.76	78 3/4 lbs.	DUDET	23.00
	77	80 3/4 lbs.	DUFOX	23.00
	81	106 lbs.	DUKAT	27.50
	60. 76. 77	4 3/4 lbs.	DYDAB	21.75
		2 1/8 lbs.	DYCEL	3.60
	77	2 5/8 lbs.	DYFOM	4.20
Diamond Point Wheel Dresser		1/8 lbs.	DYJAK	5.50
	Plain Shatterproof Eye Shields De Luxe Illuminated Eye Shields Cast Iron Floor Pedestal with water pot Cast Iron Floor Pedestal with water pot Cast Iron Floor Pedestal with water pot Twist Drill Grinding Attachment Recessed Grinding Wheel 6 x 1 x ½" Recessed Grinding Wheel 7 x 1 x 5%" Diamond Point Wheel Dresser	Plain Shatterproof Eye Shields De Luxe Illuminated Eye Shields Cast Iron Floor Pedestal with water pot Cast Iron Floor Pedestal with water pot Cast Iron Floor Pedestal with water pot Twist Drill Grinding Attachment Recessed Grinding Wheel 6 x 1 x ½" Recessed Grinding Wheel 7 x 1 x 5%" All All All All 60, 76 77 77	Plain Shatterproof Eye Shields De Luxe Illuminated Eye Shields Cast Iron Floor Pedestal with water pot Twist Drill Grinding Attachment Recessed Grinding Wheel 6 x 1 x ½" Recessed Grinding Wheel 7 x 1 x 5%" 77 2 % lbs.	Plain Shatterproof Eye Shields De Luxe Illuminated Eye Shields All 3 ¼ lbs. DOSSY Cast Iron Floor Pedestal with water pot Twist Drill Grinding Attachment With Drill Grinding Wheel 6 x 1 x ½" 60, 76 Recessed Grinding Wheel 7 x 1 x ½" 77 2 ½ lbs. DYFOM DYFOM DORPA All 1 ½ lbs. DUFOX 0, 76 4 ¼ lbs. DUFOX 0, 77 4 ¼ lbs. DYDAB 0, 76 6 2 ½ lbs. DYFOM PYOCEL 0, 77 2 ½ lbs. DYFOM

121



POLISHERS. SANDERS AND GRINDERS





No. 775



Nos. 900, 990

These versatile tools are designed for cleaning, waxing, rubbing, polishing, sanding, wire brush and arinding on a great variety of production operations as well as maintenance and repair.

No. 27 Polisher is a light, compact tool specially designed for cleaning, rubbing, waxing polishing to produce high lustre finishes. Its speed is selected to perform these operations efficier and without damage in the shortest possible time.

Nos. 775 and 900 are powerful production tools equipped with 7 inch pads which can be repla with cup grinding wheels or cup wire brush wheels.

No. 990 is a heavy duty unit powered for heavy sanding, polishing, wire brushing, stone surface and grinding requirements.

A resilient, shock absorbing coupling, exclusive in these tools, minimizes vibration and great increases their life.

MOTORS: Universal for D.C. or A.C.— 25 to 60 cycles -- 115, 220/230 and 250 volts.

PADS: Patented, super-flexible. SIDE HANDLES: Reversible. GEARS, PINIONS and SPINDLES: Heat-treated alloy steel.

BEARINGS: Precision, grease sealed ball bearing throughout.

SWITCHES: Double pole, fully enclosed. Underwriter approved.

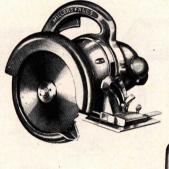
CORD: No. 27. Ten feet high grade, rubber covered, three conductor, Type S, with unbreakable plug. All of 15 feet best rubber covered, three conductor, Type S, with unbreakable plug.

	Diam. Disc	Rating	No Load R.P.M.	Amps. Full Load	Weight	Code	Price
No. 27	7"	Special	1600	3.5	8 1/4 lbs.	TAMOX	\$6
No. 775	7"	Standard	4600	6.5	13 3/4 lbs.	TECUL	6
No. 900	7"	Heavy Duty	4600	8.0	15 % lbs.	TEFAX	78
No. 990	9"	Standard	3850	8.0	16 3/8 lbs.	TRYMO .	90

For partial list of Accessories, see page 126



ELECTRIC SAWS







Powerful Fast Compact

ese are powerful, heavy duty tools for continuous production work, ripping or cross cutting to their I rated capacity in hard or soft wood. They can also be used for cutting metals, stone, concrete, e and many composite materials by employing the saws or abrasive discs specially developed for see applications. They are nicely balanced and easy to control. The telescoping saw guard ovides maximum safety.

Quick, easy adjustment of depth of cut from zero to full capacity is made by simply loosening the ob handle and rotating the motor in the frame, elevating or dropping the saw to the desired depth. gle adjustments are made by loosening the front binder lever at the front and setting at the desired gle on the quadrant from 0 to 45°.

The same cutting guide is used for all angles and the work line is kept clear by a strong air blast. sturdy, adjustable ripping guide is regular equipment.

For use at a distance from nearest power connection the following gauges of extensions are commended: 50 feet 12 gauge; 100 feet 10 gauge, and 200 feet 8 gauge.

DTORS: Universal for D.C. or A.C. up to 60 cycles.

DLTAGES: 110/115V Standard. 220/230V and 250V also available.

ARS: Precision cut and hardened, helical, alloy steel gears.

ARINGS: Precision ball bearings throughout.

ANDARD EQUIPMENT: One high quality standard combination saw blade, 15 feet of heavy duty three conductor cord with plug, rip guide, flange spanner, hex key for arbor screw and a rugged, lacquered metal carrying case.

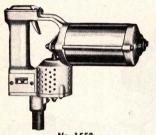
	Diam.	Maximum	Cut		Speed N.L.	We	ight		
	Saw	Rt. Angle	45°	H.P.	R.P.M.	Net	Shipping	Code	Price each
. 850	9"	31/8"	2 3/8"	1	4000	20 1/2 lbs.	42 1/2 lbs.	SLITO	\$152.00
. 1050	10"	35/8"	2 5/8"	11/4	3800	22 3/4 lbs.	44 1/2 lbs.	SMARY	180.00

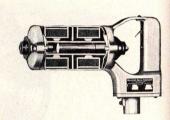
Each tool packed in a substantial, nicely finished metal carrying case in a corrugated container



ELECTRIC HAMMERS

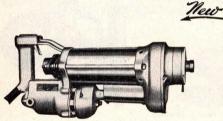
New





No. 1558

No. 1716 Sectional View





No. 4016

Nos. 2516 and 3216

Millers Falls Hammers have only one moving part — the internal solid steel hammer head wh strikes 3600 powerful blows per minute, actuated by powerful electro magnets. There are no moto gears, shafts or bearings to wear out, under the constant vibration. They are long lived, dependent and trouble free.

No. 1558, superseding the old No. 1058, is completely self-contained with the rectifier unit by into the handle. Plugs directly into the nearest 110 volt A.C. outlet to operate.

No. 4016 is an entirely new tool which automatically rotates the drill bit. A suitable clutch mechanic is included to prevent bit breakage in case of binding. It is the fastest cutting hammer made usi carbide tipped, spiral drills.

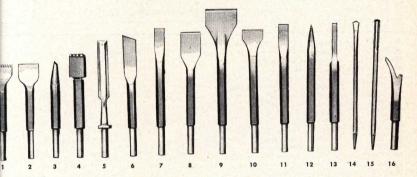
Nos. 2516, 3216 and 4016 have built-in power cooling units.

	Capacity	KW	Length	Weight	Code	Price e
No. 1558	5/8 "	.155	10"	11 lbs.	ACFGK	\$115.
No. 1716	1 1/8"	.355	15"	17 lbs.	AGILO	160.
No. 2516	11/2"	.620	153/4"	22 lbs.	AMNAR	210.
No. 3216	2"	1.000	151/2"	25 lbs.	AMOQT	240.
No. 4016	2"	1.650	18"	38 ½ lbs.	ANITA	295.

Prices above are for 110 volt, 60 cycle, A.C. units. For 220 volt, add \$10.00. For 50 cycle, 110 or 220 v add \$10.00. For 25 cycle, 110 or 220 volt add \$20.00.



ELECTRIC HAMMER TOOLS



HIGH GRADE STANDARD ROUND SHANK TOOLS

Tool	Fitting No. 1558	Price each	Fitting all others		
Buhr Stone Drilling Chisel (Toothed)	No. 1L	\$3.50	No. 1H	\$5.00	
Buhr Stone Dressing Chisel (Plain)	No. 2L	3.00	No. 2H	4.00	
Round Nose Chipping Chisel	No. 3L	2.40	No. 3H	3.60	
Bush Hammer	No. 4L	6.00	No. 4H	8.00	
3/4 Inch Wood Chisel	No. 5L	6.00	No. 5H	7.00	
Mortar Cutting Chisel	No. 6L	3.00	No. 6H	4.00	
	No. 7L	3.25	No. 7H	4.25	
Calking Tool	No. 8L	3.00	No. 8H	3.50	
Scaling Chisel	No. 9L	4.00	No. 9H	5.00	
Brick Cleaning Chisel	No. 9L	4.00	No. 10H	4.00	
2 Inch Cutting Chisel		0.00			
Cold Chisel	No. 11L	2.00	No. 11H	2.50	
Stone Point	No. 12L	2.00	No. 12H	2.50	
Cape Chisel	No. 13L	3.00	No. 13H	4.00	
Beading Tool			No. 16H	5.75	

NO. 14 DIAMOND POINT, NO. 15 STAR AND NO. 17 TRI-POINT DRILLS

	140. 1	4 DIAMOND	Citti, ito.					
ngth	Diam. 1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	3/4"
4"	\$0.55	\$0.55	\$0.55	\$0.55	\$0.60	\$0.60	\$0.70	\$0.85
0"	.60	.60	.60	.60	.70	.70	.85	1.05
0"	.70	.70	.70	.70	.80	.80	.95	1.10
0"	., 0		.85	.85	.85	.85	1.05	1.20
4"				1.05	1.05	1.05	1.25	1.40
ngth	Diam. 7/8"	1"	11/8"		11/4"	13/8"	11/2"	2"
2"	\$1.25	\$1.25	\$1.35		\$2.00	\$2.50	\$3.00	\$5.00
8"	1.45	1.45	1.60		2.50	3.00	4.00	6.00
4"	1.65	1.65	1.80		3.00	4.00	5.00	7.00
		The same of the sa						

Specify Hammer No. drills are to fit. Tri-point Drills in 6 inch and 12 inch lengths only

CARBIDE-TIPPED TRI-POINT DRILLS

ngth	Diam. 3/8"	1/2"	5/8"	3/4"	7/8"	1.
6"	\$6.00	\$7.00	\$8.50	\$11.00	\$14.00	\$16.00

Carbide-tipped Spiral Drills also available for No. 4016



PARTIAL LIST OF ACCESSORIES

		Fitting Nos.	Price e
No. 7077	7" Abrasive Discs — fine, medium or coarse	All	\$0.
No. 9099	9" Abrasive Discs — fine, medium or coarse	990	
No. 9009	Abrasive Disc Cutter		8.
No. 30231	7 1/2" Carpet Pile Pad	27, 775, 900	1.
No. 3972	4" Cup Grinding Wheel	775	4.
No. 3975	6" Cup Grinding Wheel, flared	900, 990	5.3
No. 8093	7" Felt Rubbing Pad	27, 775, 900	1.
No. 8094	9" Felt Rubbing Pad	990	2.
No. 705	5" Flexible Pad	27, 775	5.
No. 507	7" Flexible Pad "D2"	27, 775, 900	6.
No. 909	9" Flexible Pad "D29"	990	8.
No. 277	7" Lamb's Wool Bonnet	27, 775, 900	2.
No. 8098	9" Lamb's Wool Bonnet	990	3.
No. 22995	7" Sponge Rubber Cushion Pad	27, 775, 900	1.5
No. 9090	Suspension Strap, complete	990	1.0
No. 775	Suspension Spring	990	1.0
No. 4208	3 1/4" Wire Cup Brush, 1/2 or 5/8" Bushing	775, 900, 990	3.
No. 4207	4 3/4" Wire Cup Brush, 5/8" Bushing	900, 990	4.
No. 7678	5 3/4" Wire Cup Brush, 5/8" Bushing	900, 990	4.
No. 9091	5/8-11" Wire Cup Brush Spindle Nut	775, 900, 990	

FOR DRILLS PAGES 110 TO 116

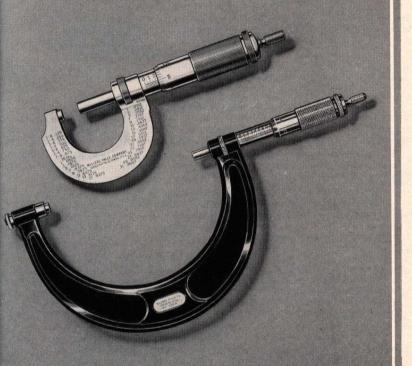
		For Drills Nos.	Price e
No. 88	Auxiliary Side Handle	414, 514, 516, 638	\$ 1.
No. 1518	Wheel Arbor, 1/2" fitting 1/4" Chucks		
No. 1523	Wheel Arbor, 1/2" fitting 1/2" Chucks		1.7
No. 1524	Feed Screw or "Old Man"	312, 658, 734, 801	6.0
No. 1522	Carbon Cleaning Brush	All	1.5
No. 1034 1/2		801	10.0
No. 1034 5/8	5/8" Cap. Jacobs Key Chuck	801	11.0
No. 1034 3/4	3/4" Cap. Jacobs Key Chuck	801	14.

FOR BENCH GRINDERS PAGES 109 AND 120

W F		Grain and Grade	Fitting Nos.	Price ea
No. 1027	1/2" Straight Spindle R.H. Thread only		60,76	\$3.5
No. 536	Taper Thread Spindle R. or L. Thread		60,76	4.1
No. 537	Taper Thread Spindle R. or L. Thread		77	4.4
No. 1039	3/8" Drill Chuck with Spindle		60.76	4.1
No. 1513	1/2" Drill Chuck with Spindle		77	4.5
No. 1519	Grinding Wheel 4 x 1/2 x 1/2"	60-M	60,76	1.1
No. 636	Grinding Wheel 6 x 1/2 x 1/2"	36-0	60,76	2.0
No. 660	Grinding Wheel 6 x 1/2 x 1/2"	60-M	60,76	2.0
No. 675	Grinding Wheel 6 x 3/4 x 1/2"	60-M	60,76	2.3
No. 685	Grinding Wheel 6 x 3/4 x 1/2"	36-0	60-76	2.3
No. 760	Grinding Wheel 7 x 1 x 5/8"	60-M	77	3.0
No. 736	Grinding Wheel 7 x 1 x 5/8"	36-0	77	3.0
No. 1036	Grinding Wheel 10 x 1 x 3/4"	36-0	81	6.9
No. 1060	Grinding Wheel 10 x 1 x 3/4"	60-M	81	6.9
No. 2036	Grinding Wheel 10 x 1 ¼ x ¾"	36-0	81	8.0
No. 2060	Grinding Wheel 10 x 1 1/4 x 3/4"	60-M	81	8.0

For Wire Brush Wheels, see page 76

PRECISION TOOLS

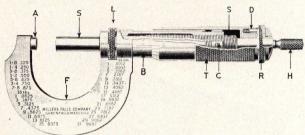


MILLERS FALLS
TOOLS
SINCE
1868



MICROMETER CALIPERS

The micrometer is the precision tool in most general use where measurements in thousandths or evolvious and capacities for outside, inside and depth measurements. While their construction is comparatively simple, the utmost care must be used in every step of their manufacture if extreme accuracy and dependability are to be secure Adjustments for wear must be provided so that the accuracy of the instrument can be maintained.



THE FRAME

The frames (F) are steel forgings of good proportions and designed to secure the strength and rigid that is essential. In the larger and a few of the smaller sizes the frames are forged in I beam for to secure rigidity without undue weight.

THE BARREL

The barrel (B) carries the threaded steel bushing in which the micrometer or lead screw runs as is part of the forged frame. The threaded bushing has an adjustable collar (C) for taking up a wear at this point. One inch, divided into 40ths, is graduated on the barrel, each graduation representing one revolution of the lead screw.

THE SPINDLE AND LEAD SCREW

The spindle and lead screw (S) in all Millers Falls micrometers is made of one solid piece of very fit tool steel carefully hardened and tempered. It is accurately machined and then allowed to seas for months before the lead screw is ground in and the spindle lapped. This precaution is taken avoid shrinkage of the finished screw and spindle. All machine operations are within extreme precision limits on machines specially developed and perfected for the purpose.

THE ANVIL

The anvil (A) is set in the frame in perfect alignment with the spindle. The faces of both the an and spindle are lapped with the utmost care so that they are at right angles to their axis and paral to each other. Proper adjustment for wear of the anvil is provided.

THE THIMBLE

The thimble (T) is rigidly fixed to the lead screw and spindle and fits down over the barrel but do not touch it. The slightest turn of the thimble results in a similar movement of the lead screw. The beveled end of the thimble is graduated into 25 equal divisions.

RATCHET STOP

The ratchet stop (R) mechanism can be easily operated by the thumb and forefinger of the san hand that holds the micrometer. This leaves one hand entirely free for holding the work to the "miked." This new departure from the old practice of combining the ratchet stop with the speeder



the end of the thimble has proven very popular because it is both convenient and speeds up work. The tension in the ratchet mechanism is nicely adjusted so that when the knurled ratchet ring is turned it ratchets when just the right amount of pressure is exerted on the spindle to give accurate readings. The ratchet stop insures uniformly accurate readings as it entirely eliminates the personal equation.

THE SPEEDER

A knurled handle (H) of small diameter, provided on all outside micrometers, is fixed to the end of the thimble. By turning this speeder between the thumb and forefinger the spindle can be run in or out very rapidly as required.

SPINDLE LOCK

A spindle lock (L) is provided on many sizes. This lock is controlled by turning a knurled nut located in the frame. A slight turn of the nut locks the spindle securely, preserving the setting at any desired point.

ACCURACY, WORKMANSHIP AND FINISH

The extreme care with which Millers Falls Micrometers are made, the special precision machinery used, the highly skilled craftsmen employed, and the pride taken in the product, permit us to recommend and guarantee the accuracy, workmanship and finish of this fine line, no matter how exacting the requirements may be.

HOW TO READ A MICROMETER

To the frame (F) is immovably fixed the barrel (B). On the inside of this barrel is a very accurately threaded bushing with a pitch of 40 threads per inch. The hidden portion of the spindle (S) is also threaded with 40 threads per inch and runs in the nut formed by the barrel (B).

The extreme right end of the spindle (S) is securely fastened to the thimble (T). These are the only moving parts and they move in unison.

An inch of the line on the barrel (B) parallel to its axis is graduated into 40 equal parts corresponding exactly to the threads per inch on the screw of the spindle (S). When the thimble (T) is given one complete rotation the spindle must move just one graduation, or 1/40 of an inch, which is 25/1000 of an inch. The beveled edge of the thimble (T) is divided into 25 equal graduations; each of these must, therefore, represent 1/25 of 1/40 of an inch, or 1/1000 of an inch. The instrument is so graduated and adjusted that when the face of the spindle (S) just touches the fixed anvil (A) the 0 graduation on the thimble (T) exactly coincides with the 0 graduation on the barrel (B).

To get the measurement between the fixed anvil (A) and the face of the spindle (S), multiply the number of divisions visible on the barrel (B) by 25 and add the number of divisions on the thimble (T) from 0 to the graduation opposite the longitudinal line on the barrel (B).

To facilitate reading, every fourth graduation on the barrel (B) is numbered, 1, 2, 3, 4, etc., the figure representing respectively 0, .100", .200", .300", .400", etc. For the same reason every fifth division on the thimble graduation is numbered.

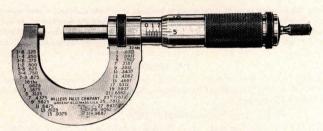
READING TEN-THOUSANDTHS MICROMETERS

Micrometers that read to one ten-thousandths of an inch have exactly the same graduations as those reading to one-thousandths, with the addition of a vernier reading to 1/10 of the 1/1000 graduations.

There are ten vernier divisions which run the entire length of the barrel (B) and are numbered on the top of the frame, as shown in the cut of the No. 902R. These ten vernier divisions correspond exactly to nine of the divisions on the thimble (T). So that the number opposite the line on the vernier that exactly corresponds with a line on the thimble graduations gives the number of ten-thousandths of an inch the micrometer has been opened beyond the last .001 inch graduation.



NO. 112R MICROMETER.



Capacity O to 1 Inch Ratchet Stop Spindle Lock Speeder

The frame of this fine micrometer is made of drop forged steel beautifully polished with decima equivalents clearly etched on one side. The anvil side is cut away which permits taking many measure ments otherwise impossible.

The precision ground lead screw and spindle are made of one piece of fine, carefully hardened tool steel. The lead screw runs in a threaded bushing in the barrel which can be adjusted to compen sate for the slightest wear. The smooth action ratchet mechanism is located on the thimble where it can be easily reached by the operating hand. The speeder is located on the end of the thimble The spindle locking device is set in the frame and is used for preserving a measurement or for setting the spindle when the mike is used as a gauge.

The faces of the anvil and the spindle are precision lapped and tested for exact parallelism to insure uniformity of readings.

Measures from 0 to 1 inch by 1/1000 inch.

Code Capacity Weight YAZTU No. 112R 0 to 1 8 ozs. Leatherette covered case WYDDA

Each micrometer packed in a slide cover, lock cornered wood box

NO. 38R MICROMETER HEAD



Capacity O to 1 Inch Ratchet Stop Speeder

These heads can be built into special gauges and fixtures and mounted on machines for making precision measurements, settings or adjustments.

The one-piece precision ground lead screw and spindle, the barrel, thimble, ratchet stop and speeder are exactly the same as used on the No. 112R above.

Range 0 to 1 inch by 1/1000 inch.

Canacity No. 38R

0 to 1'

Weight 3 ozs. Packed one in a box

Code YADAB \$7.50

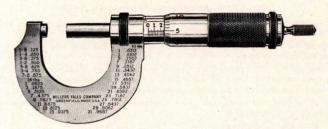
Price eac

\$13.50

2.30



NO. 902R MICROMETER



Capacity 0 to 1 Inch by 1/10000 Inch

The same fine instrument as the No. 112R on the preceding page but provided with a vernier etched on the barrel permitting direct readings in 1/10000 inch when desired. Equipped with ratchet top, speeder and spindle lock. Decimal equivalents etched on the drop forged frame.

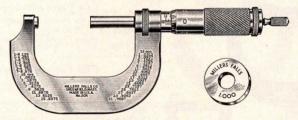
Measures from 0 to 1 inch by 1/10000 inch.

No. 902R eatherette covered case Capacity
0 to 1"

Weight 8 ozs. Code ZIABX WYDDA \$16.00 2.30

Each micrometer packed in a slide cover, lock cornered wood box

NO. 20R MICROMETER



Capacity 1 to 2 Inches Ratchet Stop Spindle Lock Speeder

his is exactly the same fine micrometer as the No. 1J2R on the preceding page but with larger rame to give a capacity of one to two inches. A precision ground, one inch disc standard, as illustrated, is supplied with each micrometer for checking the setting whenever desired.

Measures from 1 to 2 inches by 1/1000 inch.

lo. 20R eatherette covered case Capacity
1 to 2"

Weight 12 ozs. Code WYUHM WYUSY \$15.00 2.95

Each micrometer packed in a slide cover, lock cornered wood box



OUTSIDE MICROMETERS



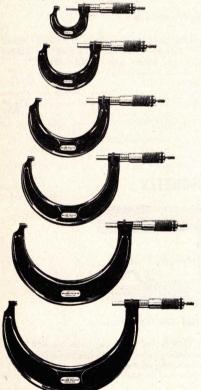
Forged Frames Ratchet Stops Spindle Locks Speeders

This new line of micrometers with ebony enameled, drop forged steel frames combines every feature desirable to make it the finest of its type.

The design of the frame gives great rigidity and strength. The anvil side is cut away to permit measurements in confined spaces.

The precision ground and hardened lead screw and spindle are made of one piece of fine tool steel. The sensitive ratchet stop is on the thimble within easy reach for one hand "miking." The speeder is located on the end of the thimble while the spindle lock is set in the frame.

The faces of the anvil and spindle are precision lapped to exact parallelism. Proper adjustments for the slightest wear are provided.



0 TO 1	INCH	MICROMETER
--------	------	------------

Specificati	ons as a	bove.	Measures	from U to
1 inch by	1/1000 i	nch.		
	Capacity	Weight	Code	Price each
No. 701R	0 to 1"	6 ozs.	KABOX	\$10.50
1		AND THE PROPERTY OF	WVDDA	2 20

1 TO 2 INCH MICROMETER

Specification 2 inches by			Measures	from 1 to
No. 712R	Capacity	Weight	Code KABUW	Price each \$11.50
Leatherette covered case			WYUSY	2.95

2 TO 3 INCH MICROMETER

Specification	ons as at	oove.	Measures	from 2 to
3 inches by	1/1000	inch.		
	Capacity	Weight		Price each
Na 722D	2 +- 2"	12 076	KARY7	\$12.50

Leatherette covered case

Leatherette covered case

3 TO 4 INCH MICROMETER

WYNRO

5.50

Specification	ons as a	bove. A	Measures	from 3 to
4 inches b	y 1/1000	inch.		
	Capacity	Weight	Code	Price each
No. 734R	3 to 4"	1 1/8 lbs.	KACAB	\$13.50
Leatherette	covered ca	se se	WYVUV	6.30

A TO E INCH MICHOMETER

7 10 3 111011 11	II CICOILLIE			
Specifications as above.	Measures	from	4	to
5 inches by 1/1000 inch.				

No. 745R	Capacity 4 to 5"	Weight 1 3/8 lbs.	Code KACAT	\$14.75
Leatherette			WYPIR	8.20

5 TO 6 INCH MICROMETER

Specificatio	ns as a	bove.	Measures	from	5 to
6 inches by	1/1000) inch.			-100
	Capacity	Weight	Code	Pr	ice each

		Capacity	Weight	Code	Price each
W	No. 756R	5 to 6"	1 1/2 lbs.	KACEF	\$15.75
7	Leatherette	covered co	ise	WYPIR	8.20

Cases are made on a wood frame nicely lined with plush and covered with imitation leather. Substantial lock and hinges. Each of the above micrometers packed one in a slide cover, lock cornered wood box. Weights given are shipping weights.





New OUTSIDE MICROMETERS

Drop Forged Frames Decimal Equivalents Speeders

he ebony enameled, drop forged frames of these micrometers are ribbed for maximum strength and rigidity without undue weight. They have the cutaway feature on the anvil side.

The precision ground lead screw and spindle are made from tool steel carefully hardened. The ead screw runs in an adjustable threaded bushing in the barrel. The thimble has decimal equivaents clearly stamped on it and a speeder is provided on its end.

The faces of the anvil and spindle are precision lapped to exact parallelism.

O TO 1 INCH MICROMETER

specifications as above. Measures from 0 to 1 inch by 1/1000 inch.

	Capacity	Weight	Code	Price each
lo. 701	0 to 1"	6 ozs.	KEBAS	\$8.50
eatherette	covered case		WYDDA	2.30

1 TO 2 INCH MICROMETER

specifications as above. Measures from 1 to 2 inches by 1/1000 inch.

No. 712	Capacity 1 to 2"	Weight 10 ozs.	Code KEBEM	Price each \$9.50
	covered cas		WYUSY	2.95

2 TO 3 INCH MICROMETER

Specifications as above. Measures from 2 to 3 inches by 1/1000 inch.

No. 723	Capacity 2 to 3"	Weight 12 ozs.	Code KEBIT	\$10.50	
eatherette			WYNRO	5.50	

3 TO 4 INCH MICROMETER

Specifications as above. Measures from 3 to 4 inches by 1/1000 inch.

	Capacity	Weight	Code	Price each
No. 734	3 to 4"	1 1/8 lbs.	KEBOL	\$11.50
eatherette	covered ca	se	WYVUV	6.30

4 TO 5 INCH MICROMETER

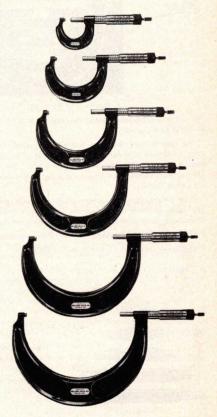
Specifications as above. Measures from 4 to 5 inches by 1/1000 inch.

No. 745	Capacity 4 to 5"	Weight 1 3/8 lbs.	Code KEBUF	\$12.75
	covered ca		WYPIR	8.20

5 TO 6 INCH MICROMETER

Specifications as above. Measures from 5 to 6 inches by 1/1000 inch.

No. 756	Capacity 5 to 6"	Weight 1 ½ lbs.	Code KEBYD	\$13.75	
The second second	covered ca		WYPIR	8.20	



Cases are made on a wood frame nicely lined with plush and covered with imitation leather. Substantial lock and hinges. Each of the above micrometers packed one in a slide cover, lock cornered wood box. Weights given are shipping weights.

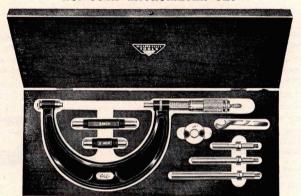


New

No. 704R

No. 563

NO. 704R MICROMETER SET



Capacity O to 4 Inches Ratchet Stop Spindle Lock Standards

The frame of this wide range micrometer is drop forged steel proportioned and ribbed for maximum strength and rigidity.

The spindle and precision ground lead screw are made of one solid piece of fine tool steel care fully hardened and tempered. It runs in a threaded bushing in the barrel which has a fine adjustment to compensate for the slightest wear. The thimble is equipped with a sensitive, smooth-acting ratchet stop mechanism and a speeder. The spindle locking device is operated by a knurled ring set in the frame.

Four interchangeable anvils which are held in the frame by a knurled thumb nut are supplied. The faces of these anvils and the spindle are precision lapped to exact parallelism. Three precision standards, described below, are also provided for checking the mike when anvils are changed.

Frame nicely black enameled, all other exposed metal parts beautifully polished.

Measures from 0 to 4 inches by 1/1000 inch.

Mediores from 0 to 4 midles by 1/ 1000 mid

Capacity Weight 0 to 4" 3 lbs.

Code Price eac YEMOX \$25.70

Each set packed in a handsome walnut case



3" rod

OYLUY

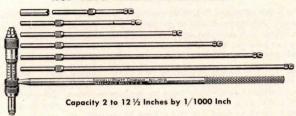
NO. 563 MICROMETER STANDARDS

These standards are made of tool steel, hardened and polished. The one inch standard is a round disc. All other size are rods with their faces precision lapped. The rods are equipped with hexagonal hard rubber grips to protect then from body heat and prevent rolling.

Price each		Capacity	Code	Price ead
\$2.00	No. 563	4" rod	YUKAV	\$3.20
2.50	No. 563	5" rod	YUKCY	3.50
3.00	No. 563	6" rod	YUKEP	3.75



NO. 1218 INSIDE MICROMETER



The head of this fine instrument is provided with a precision ground and hardened spindle and lead crew with a $\frac{1}{2}$ inch run. Seven easily interchangeable rods with hardened anvils in one end are provided. These anvils are adjustable to compensate for the slightest wear. The shanks of the rods are slipped directly into the end of the spindle until the collar comes to a positive seat. This contact can be easily kept free from dirt or dust and is a valuable feature for that reason. The rods are locked by tightening the knurled chuck nut.

Two hardened steel collars, exactly $\frac{1}{2}$ and 1 inch in length, that slip over the shanks of the rods are provided and are used in various combinations. Two sets of graduations are provided on the parrel so that direct readings can always be made no matter what combination of rods and collars are in use. Complete instructions are packed with each micrometer. A long handle that screws into the head is provided for making measurements otherwise inaccessible.

Entire tool beautifully polished.

No. 1218 eatherette case 2 to 12 1/2"

Weight 3/4 lb.

Code ZISTA ZISTO \$14.50 5.05

Packed one micrometer in a wood box

MICROMETER DEPTH GAUGES

Capacity 0 to 3 Inches by 1/1000 Inch

Designed to make accurate measurements of the depth of holes, slots, shoulders and projections. The spindle has a full one-inch movement and is graduated to read by 1/1000 inch.

Three measuring rods with hardened ends, carrying an adjusting device to compensate for wear, give a capacity of 0 to 3 inches. The rods are inserted through a hole in the lead screw by removing the knurled end nut on the thimble. They are brought to a positive bearing against a finished seat on the end of the lead screw. This gives a positive end contact that does not depend on any device liable to be lost or worn and without rods projecting above the top of the thimble.

The base is 17/32 inch wide, hardened, ground and accurately hand lapped at right angles to the rods.



Leatherette case for No. 32

Capacity	Weight	Code	
0 to 3"	6 ozs.	YAALC	
0 to 3"	8 ozs.	YAAWN	
		YAASK	
		YABIT	

Packed one depth gauge in a wood box

Extra set of 3 rods for measurements 3 to 6 inches Extra set of 6 rods for measurements 6 to 12 inches 3.75

Price each

\$12.50

16.00

3.05

3.70



PRECISION STEEL RULES

The standards to which all Millers Falls Rules are made are among the finest in existence, and are checked at intervals with the standards of the United States Bureau of Standards at Washington. Every Millers Falls Rule is as perfect a reproduction of these standards as skilled mechanics and precision machinery can produce, and we guarantee them to be as close to absolute accuracy as it is possible, commercially, to make them.

The steel used is a fine quality of carefully heat-treated crucible steel. They are ground and polished to a beautiful satin finish, and precisely graduated on dividing engines developed and perfected over a period of nearly sixty years by our own engineers. The graduation lines are of different lengths and sharply and uniformly etched, making them very easy to read correctly. The figures are deeply etched, of good size, and shaded for legibility.

Light and semi-flexible tempered rules and square blades are graduated on all four edges in No. 4 graduation — 8ths, 16ths, 32nds and 64ths of an inch. Flexible and narrow rules and depth gauge blades are graduated on two edges in No. 10 graduation — 32nds and 64ths of an inch – except No. 106.

LIGHT TEMPERED RULES

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4 8 12 16 20 24 28	4 8 12 13 20 24 23	4 8 15 18 20 S4 S8	4 8 12 15 20 24 28	4 8 12 16 20 24 23	# 8 TS TB 50 54 58
GA T	GOODELL-PRATT CO. 2	GREENFIELD S	MASS. U.S.A.	TEMPERED 5	æ
8 16 24 32 40 48 56	8 16 24 32 40 48 56	8 16 24 32 40 48 56	8 16 24 32 40 48 56	8 16 24 32 40 48 56	8 16 24 32 40 48 56
44-14-14-14-14-14-14-1		4444444444444	1.	414444444444444444	Artistate de la dela del de la dela del de la dela de

Numbered for Quick Reading

Graduated full length in 8ths and 16ths of an inch on one side and 32nds and 64ths of an inch on the other. For fast, positive reading the 32nds and 64ths graduations are numbered every 8th of an inch. No end graduations.

	Length	Width	Thickness	Weight Box	Code	Price each
No. 866	6"	3/4"	1/20"	6 1/2 ozs.	ZEPUL	\$1.20
No. 866	12"	1"	1/16"	19 ozs.	ZEPAT	2.15
No. 866	18"	1"	1/16"	27 ozs.	ZEPON	3.30

SEMI-FLEXIBLE TEMPERED RULE



Graduated full length on four edges in 8ths, 16ths, 32nds and 64ths of an inch. No. 253 is end graduated in 32nds of an inch.

	Length	Width	Thickness	Weight Box	Code	Price each
No. 253	6"	5/8"	1/50"	3 ozs.	YIAWY	\$1.20
No. 255	12"	3/4"	1/50"	6 1/2 ozs.	YIBCA	2.00
			Packed six in a b	oox		



FLEXIBLE TEMPERED RULE

	tibini <u>kiderlah bilandah bahar bida</u>	<u>landa de de de la companya della co</u>	
E 364 1	MILLERS FALLS CO. 2 GREENFIELD	MASS 3 TEMPERED 4	MADE INUSA 5 No.10 25

aduated full length on two edges, on one side only in 32nds and 64ths of an inch. Ends graduated 32nds of an inch.

Len

264

Length Width 6" 5/8"

dth Thickness 1/100"

Weight Box

Code YICFE Price each

Packed six in a box

NARROW TEMPERED RULE

1 GOODL-PANT CO 2 GOODL-PANT C

advated full length in 32nds of an inch on one side and 64ths of an inch on the other.

274 6"

Width

Thickness 1/20" Weight Box 2 1/4 ozs.

Code YIDGF Price each

Packed six in a box

TEMPERED HOOK RULE

Da . le re cara e . le re cera e . le re cara e . l

Numbered for Quick Reading

r taking measurements over rounded corners, through the hubs of wheels or pulleys, or for setting riders, or inside calipers and many other uses. The hardened steel hook is locked on by an eccentrol and can be easily removed if desired. Graduated full length in 8ths and 16ths of an inch one side and 32nds and 64ths of an inch on the other, with graduations numbered at every not an inch.

966 6"

Length Width 6" 3/4"

Thickness 1/20"

Weight Box

Code ZIJJO Price each

Packed one in a box

NARROW HOOK RULE



e hardened hook can be easily removed by giving the eccentric stud one half turn. Graduated 32nds of an inch on one side and 64ths of an inch on the other.

771 6"

ngth Width

Thickness 1/20"

Weight Box

Code ZEAMD Price each

Packed one in a box



NO. 106 FLEXIBLE STEEL RULE



A high grade, flexible six inch steel rule made of carefully heat-treated crucible steel with a fine ground satin finish on all faces. It is precision graduated on two edges in 16ths and 32nds of a inch. The figures are deeply etched and shaded for quick, easy legibility. Each rule is mounted or a card printed in red and black and packed in a cellophane envelope to protect it from moisture.

No. 106

Length

Width 5/8"

Thickness 1/100" Packed six in a box Weight Box 4 ozs. Code WYUVA \$0.60

NO. 20 VEST POCKET RULE

An extremely convenient, six inch precision steel rule for carrying in the vest pocket. It is equipped with a pocket clip which also acts as a base so that the rule can be used as a depth gauge.

Nicely finished and engine graduated. Both graduations and figures deeply etched for easy reading.

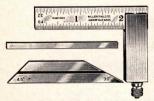
Graduated in 32nds of an inch on one side and 64ths of an inch on the other.

Each rule mounted on a card, as illustrated, and packed in a moistureproof cellophane envelope.

Length Width Thickness Weight Box No. 20 6" 1/4" 1/20" 4 ozs.

Packed six in a box





NO. 222 DOUBLE STEEL SQUARE

Price each

\$0.50

Code

WYUCH

A precision toolmaker's square with three interchangeable blades that slide their entire length in the solid steel bear. The two wide blades can also be reversed so that the graduations can be placed on either side of the beam and the angles faced either up or down. Blades are locked any desired position by turning the knurled thumb nut on the bottom of the beam.

The $2\frac{1}{2}$ by $\frac{1}{2}$ inch blade is graduated in 32nds of an inch on one edge and 64ths of an inch of the other. The beveled blade is ground to 30° at one end and 45° at the other. The narrow blad is $2\frac{1}{2}$ by $\frac{1}{8}$ inch. All parts have a fine satin polished finish, clear etched graduations and figures

No. 222

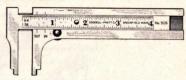
Length Blades 2 1/2" Weight 3 ozs.

Code YISCO Price each



SLIDE CALIPER RULES





e most popular and convenient measuring device available. Precision built in every detail it can used as an ordinary rule or as an outside or inside caliper providing direct readings of the measure-ent taken. The rule graduations in 32nds of an inch are etched on one edge and the outside and ide graduations on the slide are in both 32nds and 64ths of an inch.

The slide can be locked at any point by tightening the knurled lock nut which is easily controlled the thumb of the hand that holds the tool.

Nicely polished to a satin finish with clear, etched graduations and figures.

	- 1 4 - 1 - 1 - 4 - 4 - 4 - 4 - 4 - 4 -		Minimum Inside			
	Length	Depth of Jaws	Measurement	Weight	Code	Price each
303	3"	11/16"	1/8"	2 ozs.	YIHLU	\$5.25
305	5"	1 7/16"	1/4"	4 ozs.	YIHTO	6.50
			Duelend and in a ba			

NO. 80 RULE DEPTH GAUGE

e three inch steel base of this highly useful tool is precisely ground and ely polished. A vertical slot machined at 90° to the base accommotes the narrow tempered rule which is graduated on one side in 32nds d 64ths of an inch on the other. This rule runs through a friction ring-controlled clamp screw controlled by a knurled thumb nut on the verse side.

By loosening the nut the rule is freed and can be either run up or down in slot, or pivoted to any angle and used as an angle gauge. For superpose the base is accurately etched in angle graduations for 30°, and 60° angles, both right and left.

Length Rule Width Base Weight Code Price each
6" 1/4" 3" 2 ozs. YAPUL \$2.50

Packed one in a box





ade of tempered crucible steel, ground and lapped to a light-tight fit with a 60° standard for nding and setting screw cutting tools. Graduated on four corners in 14ths, 20ths, 24ths and 32nds an inch for the number of threads per inch.

> Angle 60°

. 80

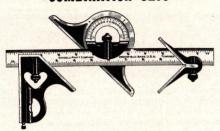
. 438

Weight Box 1 ½ ozs. Packed six in a box Code YOMAS Price each \$0.75

30



COMBINATION SETS



Hardened Steel Blades

These useful precision tools are essential to every machinist and toolmaker. They perform the functions of a wide variety of specialized tools. They can be used as a square, a depth gauge, a mitra a rule, a protractor and a center finder all in one. They are provided with a beam equipped with a small level and a scriber, a precision protractor fully described on the following page, and centering head. These can be moved and locked to any desired point on the blade or remove entirely.

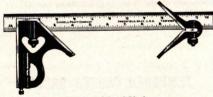
The tempered blade is precision graduated; all graduation lines and figures being clearly etche and given a fine ground satin finish. The beam, protractor and centerhead have precision groun working faces and polished edges and ebony enameled webs.

Blade precision graduated on four edges in 8ths, 16ths, 32nds and 64ths of an inch.

	Length Blade	Weight	Code
No. 390	9"	1 ½ lbs.	YOERZ
No. 391	12"	1 5/8 lbs.	YOEVD

Packed one set in a box

COMBINATION SQUARES



Hardened Steel Blades

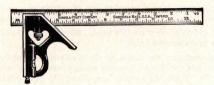
This is the same fine square as above but without the protractor which can be added whenever desire. The working faces of the beam and centerhead are precision ground, the edges polished and twebs ebony enameled. The blade is tempered steel with a fine satin finish.

Blade precision graduated on four edges in 8ths, 16ths, 32nds and 64ths of an inch.

	Length Blade	Weight	Code
No. 361	6"	3/4 lb.	YIZYH
No. 362	9"	1 lb.	YOAGM
No. 363	12"	1 1/2 lbs.	YOAHN
		Packed one in a box	



COMBINATION SOUARES



Hardened Steel Blades

ese are the same precision squares as shown on the preceding page but without protractor head centerhead. The beams, equipped with a level and a scriber, have precision ground working tes with polished edges and ebony enameled webs. The blades are tempered, precision aduated and clearly etched.

Blade precision graduated on four edges in 8ths, 16ths, 32nds and 64ths of an inch.

	Length Blade	Weight	Code	Price each
. 371	6"	5/8 lb.	YOBJE	\$3.00
. 372	9"	3/4 lb.	YOBLO	4.00
. 373	12"	₹ lb.	YOBOL	4.60

Packed one in a box

REVEL PROTRACTORS



Hardened Steel Blades

ese protractors have a smooth action turret head precisely graduated from 0° to 90° , right and t, for a total of 180° . It can be set at any desired angle within this range. A small level is mounted one side which makes it possible to determine angles to the horizontal and adds greatly to the sfulness of the tool. They are provided with satin finish, precision graduated and etched blades which they can be locked at any point.

No. 180 Protractor Head only fits the blades on the foregoing squares.

The hardened blades are graduated on four edges in 8ths, 16ths, 32nds and 64ths of an inch.

the same of the sa				
	Length Blade	Weight	Code	Price each
. 180	Protractor Head Only	5/8 lb.	YEJEG	\$4.00
. 181	9" complete	7/₂ lb.	YEJJO	5.75
. 182	12" complete	1 lb.	YEJUK	6.40

Packed one in a box



SPRING CALIPERS AND DIVIDERS

The pages immediately following show a very fine line of outside and inside calipers and dividers. They are designed to meet the most exacting requirements of skilled machinists and toolmakers.

The stock used is a fine grade of hard crucible steel. All edges are nicely rounded and the entire tool ground and polished to a beautiful finish.

The legs are nicely tapered and the shape of the points developed for maximum accuracy in calipering of every description and for transferring measurements to or from a micrometer or steel rule within very close limits. Inside caliper legs are shaped to permit their use in unusually small spaces. Divider points are nicely tapered and carefully hardened and tempered.

Precisely machined and hardened screws are used on all spring calipers and dividers. The nuts are of two types, "solid" and "quick," both of which are hardened. Solid nuts are of ordinary construction. The threaded portion of quick nuts is made in two parts which are spread apart by a small spring when the pressure of the leg is removed. This disengages the threads and the nut can then be slipped over the entire length of the screw or any portion of it very rapidly and without turning it. The instant the leg is allowed to press against the nut it engages the screw thread again and the final adjustment is made by turning the nut in the usual manner.

Side deflection in calipers or dividers destroys their value for precise work, and the greatest care is used to eliminate it from these spring calipers and dividers. Accurately machined and hardened steel spools or fulcrum studs with a good wide face are used and the bearings in the legs are care fully fitted to them. These are held in close contact by stiff, heat-treated steel springs, making a very rigid tool.

Spring dividers have a finely knurled handle riveted to the spring to facilitate the describing of arcs and circles.

SPRING DIVIDERS



	Size	Weight Box	Code	Price e
No. 500	3"	1/4 lb.	YUAJT	\$1.
No. 500	4"	3/8 lb.	YUASF	1.
No. 500	5"	1/2 lb.	YUBAM	1.
No. 500	6"	3/4 lb.	YUBIP	1.
No. 500	8"	1 lb.	YUBNA	2.
No. 500	10"	1 1/2 lbs.	YULYE	2.
No. 500	12"	1 3/4 lbs.	YUMAY	2.
		WITH QUICK NUT		
	Size	Weight Box	Code	Price e
No. 600	3"	1/4 lb.	YUVNY	\$1.
No. 600	4"	3/8 lb.	YUVUM	2.
No. 600	5"	1/2 lb.	YUWAJ	2.
No. 600	6"	3/4 lb.	YUWIL	2.
No. 600	8"	1 lb.	YUWYP	2.
No. 600	10"	1 ½ lbs.	ZAHZY	3.
No. 600	12"	1 3/4 lbs.	ZAIFS	3.
		Packed three in a box		

WITH SOLID NUT



INSIDE SPRING CALIPERS

			WITH SOLID NUT		
		Size	Weight Box	Code	Price each
	No. 510	3"	1/4 lb.	YOYUK	\$1.40
	No. 510	4"	3/8 lb.	YOYZM	1.50
[g Y \ .	No. 510	5"	1/2 lb.	YOZHE	1.60
(STRONG)	No. 510	6"	3/4 lb.	YOZMY	1.70
§ \ \	No. 510	8"	1 1/4 lbs.	YOZOK	1.85
	No. 510	10"	1 5/8 lbs.	YUJEV	2.50
	No. 510	12"	2 lbs.	YOLUY	2.70
			WITH QUICK NUT		
		Size	Weight Box	Code	Price each
	No. 610	3"	1/4 lb.	YUSYL	\$1.70
	No. 610	4"	3/8 lb.	YUTAG	1.80
	No. 610	5"	1/2 lb.	YUTGA	1.90
	No. 610	6"	3/4 lb.	YUTKO	2.00
	No. 610	8"	1 1/4 lbs.	YUVAH	2.20
	No. 610	10"	1.5/8 lbs.	ZAFUV	2.70
	No. 610	12"	2 lbs.	ZAFWY	3.10
			Packed three in a bo	×	

OUTSIDE SPRING CALIPERS

		WITH SOLID NU	JT		
	Size	Weight Box	Code	Price each	
. 520	3"	1/4 lb.	YOWEF	\$1.40	
. 520	4"	3/8 lb.	YOWIG	1.50	
. 520	5"	1/2 lb.	YOWOH	1.60	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
. 520	6"	3/4 lb.	YOWYK	1.70	
. 520	8"	1 3/8 lbs.	YOYFA	1.85	
. 520	10"	1 5/8 lbs.	YUHET	2.50	
. 520	12"	2 lbs.	YUHSA	2.70	
		WITH QUICK N	UT		
	Size	Weight Box	Code	Price each	
. 620	3"	1/4 lb.	YURAD	\$1.70	
. 620	4"	3/8 lb.	YURFE	1.80	
. 620	5"	1/2 lb.	YURIG	1.90	
. 620	6"	3/4 lb.	YURUJ	2.00	
. 620	8"	1 3/8 lbs.	YUSEG	2.20	
. 620	10"	1 5/8 lbs.	ZADVY	2.70	
. 620	12"	2 lbs.	ZADYV	3.10	
	ı	acked three in a l	oox		



HERMAPHRODITE SPRING CALIPERS

Design and construction same as the outside and inside types. Legs nicely shaped and tapered. Divider leg hardened and nicely pointed. Hardened spools and screws. Powerful tempered springs. Finely polished finish.

		WITH SOLID NUT		
	Size	Weight Box	Code	Price each
No. 530	3"	1/4 lb.	YUFER	\$1.40
No. 530	4"	3/8 lb.	YUFTO	1.50
No. 530	5"	1/2 lb.	YUFWY	1.60
No. 530	6"	3/4 lb.	YUGAR	1.75
		WITH QUICK NUT		
	Size	Weight Box	Code	Price each
No. 630	3"	1/4 lb.	ZACRO	\$1.65
No. 630	4"	3/8 lb.	ZACTY	1.80
No. 630	5"	1/2 lb.	ZACUS	1.95
No. 630	6"	3/4 lb.	ZACYT	2.10
	F	acked three in a bo	x	



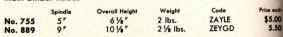
SURFACE GAUGES

These gauges embody all the most desirable features in a tool of this kind but still are very moderately priced. They are well built in every detail and nicely finished.

The heavy gray iron base, 3'' by $2^{1}/2''$ by 7/8'', is carefully ground for use on a surface plate and also grooved for use on cylindrical surfaces. All working faces are ground. Two frictional gauge pins located at the rear can be depressed to bear against the edge of surface plates, slots of planers and similar uses.

The spindle slides through a spring tensioned binder head with a knurled thumb screw control. This is pivoted on the base and provided with a screw for fine height adjustment. The spindle can be set at almost any angle or even turned down through the slot in the front of the base for use as a depth gauge or it can be dropped down through the binder head and the marker on its lower end used as a scratch gauge.

The scriber, six inches long, is carried in a head with spring control which holds it at any desired height on the spindle. It can be locked by merely tightening the knurled thumb screw. For work close to the surface plate the spindle can be removed and the scriber used in the main binder head.









THICKNESS GAUGES

ese gauges are used extensively in airplane and automobile maintenance and repair for such perations as setting spark gaps, distributor points and tappet clearances, determining piston and ng clearances, etc. Also very generally by toolmakers and machinists in jig and fixture, gauge and auging work, shimming and experimental uses.

The leaves are made of fine, tempered steel, individually tested to very close limits and well finished. ley are assembled in cases with heavy steel side plates and studs, held together by screws or rivets the case may be. Thicknesses are clearly etched on each leaf.





NO. 6 THICKNESS GAUGE - SIX 2 1/6" LEAVES

onsists of six leaves 2 16" long, 1/2" wide and .002, .003, .004, .006, .008 and .010 inch thick. e case is assembled with rivets.

Length Leaves 2 5/16" 0. 6

Width 1/2"

Weight Box 3/8 lb. Packed six in a box

Code WYGDE \$0.50

NO. 9 THICKNESS GAUGE - NINE 3 1/16" LEAVES

onsists of nine leaves 3 1/6" long by 1/2" wide and .0015, .002, .003, .004, .006, .008, .010, .013, nd .020 inch thick. The case is assembled with rivets.

Length Leaves 0. 9 3 1/16"

Width

Weight Box 1/2 lb. Packed six in a box

Code WYIFO Price each \$0.75

920 O 20 025 BB

NO. 25 THICKNESS GAUGE — TWENTY-FIVE 2 1/4" LEAVES

onsists of twenty-five leaves 2 1/6" long by 1/2" wide and .0015, .002, .003, .004, .005, .006, .007, 08, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, 24 and .025 inch thick. The case is assembled with rivets.

Length Leaves o. 25

2 5/16"

Width 1/2"

Weight Box 1 lb. Packed six in a box

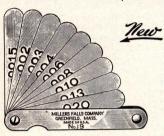
WYZCY

Price each \$1.60



THICKNESS GAUGES

These are the same precise, well-made gauges as described on the preceding page but with screw studs at the leaf end of the case to permit easy replacement of leaves or adjustment of the tension.





NO. 19 THICKNESS GAUGE - NINE 3 1/16" LEAVES

Consists of nine leaves $3 \frac{1}{16}$ " long, $\frac{1}{2}$ " wide and .0015, .002, .003, .004, .006, .008, .010, .012 and .015 inch thick.

	Length Leaves	Width	Weight Box of Six	Code	Price each
No. 19	3 1/16"	1/2"	½ lb.	WYROL	\$1.60

NO. 22 THICKNESS GAUGE — TWENTY-TWO 2 %" LEAVES

Consists of twenty-two leaves 2% ong, $\frac{1}{2}$ wide and .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024 and .025 inch thick.

	rendin reaves	Widin	Treigili box of Six	Code	Luce edu
No. 22	2 5/16"	1/2"	7⁄8 lb.	WYVUT	\$3.00
					7,77,77,800

NO. 926 THICKNESS GAUGE — TWENTY-SIX 3 1/4" LEAVES
Consists of twenty-six leaves 3 1/4" long, 1/2" wide and .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024 and .025 inch thick

	Length Leaves	Width	Weight Box of Six	Code	Price each
No. 926	3 1/16"	1/2"	1 3/8 lbs.	WYWAR	\$4.00

NO. 100 THICKNESS GAUGE STRIPS



These convenient strips are available in twenty-six different thicknesses. They are 12'' long and 12'' wide. Each strip is individually tested and held within very close tolerances. They are nicely finished and the thickness of each strip is clearly etched into the steel at two points. The ends are rounded and carefully finished for accuracy.

			Code:	WYUTO			
Thickness	Price each						
.0015	\$0.40	.007	\$0.25	.013	\$0.25	.019	\$0.25
.002	.40	.008	.25	.014	.25	.020	.25
.0025	.40	.009	.25	.015	.25	.021	.25
.003	.40	.010	.25	.016	.25	.022	.25
.004	.30	.011	.25	.017	.25	.023	.25
.005	.30	.012	.25	.018	.25	.024	.25
.006	.30					.025	.25

Packed six in a substantial telescope box. Average weight per box 31/2 ounces



SCREW PITCH GAUGES

Designed for quickly and positively determining the pitch of screw threads. The teeth milled on the thin blades are the exact profile of a standard screw thread, each eaf being numbered with its own particular pitch. To determine the pitch of a screw try successive leaves of the gauge until the one is found which meshes perfectly with the thread. The pitch can then be read directly from the leaf.

The leaves are shaped so that they can be inserted nto tapped holes for gauging internal threads as well as external. The leaves not in use can be folded into the handle.



No. 135 has 22 pitches for V-threads, as follows: 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38 and 40. Length of leaves, 1 inch.

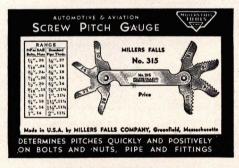
No. 436 has 30 pitches for V-threads, as follows: $4, 4 \frac{1}{2}, 5, 5 \frac{1}{2}, 6, 7, 8, 9, 10, 11, 11 \frac{1}{2}, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42. Length of leaves, <math>1\frac{1}{8}$ inches.

No. 135 22 No. 436 30 Length Leaves
1 "
1 1/8"

Code YECUD YOLVO \$1.40 1.75

Packed one in a box

NO. 315 SCREW PITCH GAUGE



A popular priced gauge with eight leaves, covering all National Fine (NF) or SAE threads from 1/4 inch-28 to 1 inch-14 and Standard Pipe threads from 1/8 inch-27 to 2 inches-11 1/2. In other words, all the standard threads both NF or SAE and Pipe used in the automotive and aviation fields.

Each gauge mounted on a card printed in red and black as illustrated.

No. 315 No. Leaves

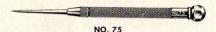
Weight Box 6 ozs.

Code WIBAL Price each

Packed six in a box



SCRIBERS



The body of this tool is made of finely knurled steel tubing with a chuck which holds the finely drawn, tempered scriber point securely. The point can be removed and reversed for complete protection when not in use.

Price each

\$0.60

No. 75

Blade
Overall
Weight Box
Code
3 ozs.
YAJRA
Packed six in a box

NO. 58

NOS. 61 and 62

Made of fine grade, round steel with beautifully tapered points carefully tempered, ground and polished. The central body is nicely knurled to give a sure grip. Points in Nos. 61 and 62 are replaceable.

Length Body Weight Box Code No. 58 41/2" Single 5/32 " 4 ozs. YAHOC \$0.50 61/2" No. 61 1/4" Double 5 ozs. YAIGZ No. 62 Double 91/2" 1/4" 6 ozs. YAIJA .60 Packed six in a box

NO. 440 SPEED INDICATOR



A very useful, easily operated indicator selling at a low price and having many sterling features.

The fixed dial is graduated both ways so that the speed of clockwise or counterclockwise shafts can be read directly. The rotating dial is quickly set to 0 by merely turning the knurled thumb screw to the left and tightening after the setting has been made.

The mechanism consists of a burnished worm cut on the steel spindle which drives the worm gear operating the recording dial. The spindle is hardened and the contact pressure is taken up on a ball thrust bearing. Two rubber tips are furnished, one for centered and one for plain or pointed shafts.

Complete instructions for setting and reading with each indicator.

Entire tool polished and nickel plated.

No. 440 Length Weight Code Price each VOMOB \$1.75

Packed one in a box

PARTS



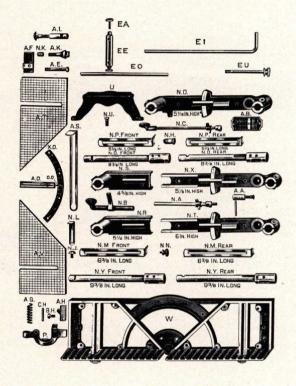


MILLERS FALLS
TOOLS
SINCE
1868



PARTS FOR LANGDON ACME MITRE BOXES

Nos. 68 to 75 and Nos. 71A to 75A





PARTS FOR LANGDON ACME MITRE BOXES

Nos. 68 to 75 and Nos. 71A to 75A

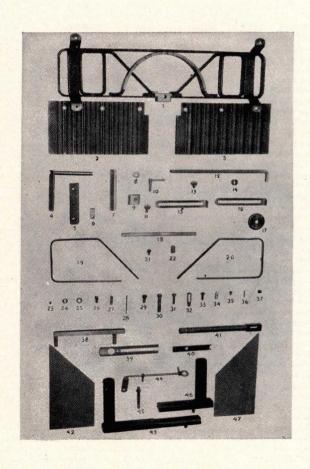
		For Bo	oxes Nos.	Price each
AA	Binder		71A-75A	\$0.15
AB	Index Plate		71A-75A	
AD	Gib		71A-75A	
AE	Gib Screw		71A-75A	
AF	Binding Strap.		71A-75A	
G	Spring		71A-75A	
AH .	Stop Lever Strap		71A-75A	
AI	Stock Rest		71A-75A	.30
K	King Bolt		71A-75A	
AS	Length Gauge			
4	Length Gauge, complete		71A-75A	
AT	Right Hand Bottom Board	48-75	71A-75A	
V	Left Hand Bottom Board		71A-75A	
Н	Stop Lever Strap Screw		71A-75A	
	Stop Lever Pin		71A-75A	
CH	Length Gauge Link Screw (2)	00-75	71A-75A	
A			71A-75A	
E	L.G. Link with Screws		71A-75A	
	Length Gauge		71A-75A	
0	L.G. Guide Rod		71A-75A	
U	L.G. Lock Screw			
AA	Stop Lever Rod		71A-75A	
NB	Thumb Lever		71A-75A	
NC	Thumb Stop Lever			
ND	Saw Guide (Front)		71A-73A	
ND	Saw Guide (Rear)		71A-73A	
NH	Elevator		71A-75A	
47	Guide Stop Screw		71A-75A	
NK	King Bolt Stop Screw		71A-75A	
NL	Guide Stop		71A-75A	
MM	Stop Gauge (Front and Rear)		74A-75A	
NN	Stop Gauge Thumb Screw		71A-75A	
NO	Swinging Lever			4.00
NP	Stop Gauge (Front and Rear)	68-73	71A-73A	a decide and a second control of the second
NR	Sliding Front Post		74A-75A	
NS	Sliding Front Post		71A-73A	
NT	Swinging Lever		74A-75A	
NU	Leg Screw		71A-75A	
NX	Swinging Lever		71A-73A	
NY	Saw Guide (Front)	74-75	74A-75A	
NY	Saw Guide (Rear)		74A-75A	
00	Indicator	68-75	71A-75A	
P	Stop Lever		71A-75A	
\$5	Swinging Lever Bearing		71A-75A	
U	Leg		71A-75A	
W	Bed and Back		71A-75A	6.60
xo	Graduated Arc		71A-75A	
			The state of the s	

Parts NO, P, NR, NS, NT, U, W and NX have corresponding letters cast in them, so, if in doubt, reference may be made to the castings.



PARTS FOR GOODELL-PRATT ALL STEEL MITRE BOXES

Nos. 1144, 1144A, 1264, 1264A, 1285, 1285A, 1305, 1305A, 1306 and 1306A Nos. 1002, 1003 and 1004





PARTS FOR GOODELL-PRATT ALL STEEL MITRE BOXES

Nos. 1144, 1144A, 1264, 1264A, 1285, 1285A, 1305, 1305A, 1306 and 1306A Nos. 1002, 1003 and 1004

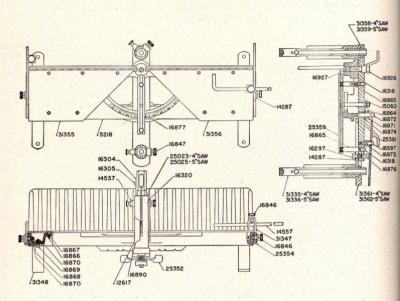
Name of Fart	Price each
Bed (with legs)	\$10.50
Back—left hand	1.15
Back—right hand	1.15
Attachment A. al. Clid	
Attachment Angle Slide	.55
Attachment End Block	.50
Attachment Block	.10
Attachment Length Gauge Slide	.50
Attachment Washer	.10
Attachment Clamp	.10
Attachment Binding Screw	.10
Attachment Knurled Screw	.10
And the set of the set	
Attachment Length Gauge	.20
Depth Gauge Knurled Screw	.30
Depth Gauge Bent Washer	.10
Front Depth Gauge	.30
Back Depth Gauge	.30
Ball Bearing, complete	.35
Scale and Escutcheon Pins	.90
Right Hand Riser	.15
Left Hand Riser	
	.15
Back Screw (also Gib Screw)	.10
Guide Stop (Automatic Detent)	.20
Copper Plug	.10
Nut for R. and L. Binder Screw	.10
Sliding Lever Binder Bolt Washer	.10
Boss Binder Screw (1/2 x 5/16"—18 Sq. Hd.)	.10
Catch Lever Pin	.10
Bottom Plate Pin	.10
Lever Screw (% x 1/6"—18 Fil. Hd.)	.10
Boss Screw	.10
Attachment Block Screw (4) (1 x 1/4 "—20 R. H.)	
Afrachment Block Screw (4) (1 x 1/4 == 20 R. H.)	.10
Saw Stop (2)	.10
Gib Screw (¾ x ¼ "—20 R. H. Mch.)	.10
Catch Lever Spring	.15
Saw Stop Screw (2) (5/16"—10-32 R. H. Mch.)	.10
Lever Pin	.10
Ball Cage, complete	.10
Gib (with Plugs and Brass Pin).	.70
Catch Lever—large part	.20
Catch Lever—small part	.15
Saw Guide (give width of saw)	2.30
Bottom Plate—left hand	.50
Swinging Lever, complete	3.50
Pull Rod, complete	.40
R. and L. Binding Screw	.20
Sliding Lever, complete	2.80
Bottom Plate—right hand	.70
Complete Set End Attachments	2.00

See Cut on Preceding Page



PARTS FOR LANGDON ACME MITRE BOXES

Nos. 72C, 73C, 74C and 75C 1071C and 1074C

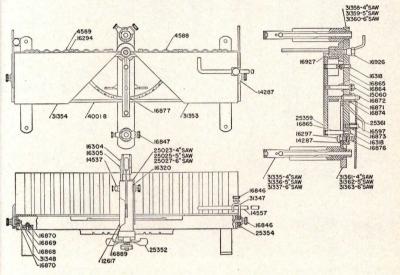


No.	Part	Price each	No.	Part	Price
5218	Bed	\$8.75	16873	Locking Lever Bushing	\$0
12617	Name Plate Screw (2)	.10	16874	Locking Pin Bushing Check Nut	
14287	Washer (3)	.10	16876	Locking Lever Spring	
14537	Elevator Put-up (2)		16877	Gib Indicator Pin	
14557	Length Gauge	.25	16890	Name Plate	
15060	Hex Nut		16926	King Bolt	
16297	Fillister Head Screw	.10	16927	King Bolt Lock Screw	
16304	Saw Stop (2)	.10	25023	Depth Gauge (4 " Saw) (2)	
16305	Saw Stop Screw (2)		25025	Depth Gauge (5 " Saw) (2)	
16318	Gib Plug Screw (2)	.10	25352	Lever Clamp	
16320	Depth Gauge Bent Washer (2)	.10	25354	End Plate (2)	
16597	Round Head Screw	.10	25359	Gib	
16846	End Bracket Screw (2)	.15	25361	Locking Lever	
16847	Depth Gauge Screw (2)	.15	31335	Saw Guide Put-up (4 " Saw) (2)	•
16864	Binding Screw	.15	31336	Saw Guide, complete (5 " Saw) (2)	
16865	Gib Plug (2)	.10	31347	End Bracket (2)	
16866	Bottom Plate Screw (10)	.10	31348	Leg (2)	
16867	Bottom Plate Nut (2)	.10	31355	Bottom Plate-left hand	
16868	End Plate Screw (4)	.10	31356	Bottom Plate-right hand	
16869	Leg Screw (4)	.10	31358	Long Lever Put-up (4 " Saw)	
16870	Leg Nut (4)	.10	31359	Long Lever Put-up (5 " Saw)	3
16871	Locking Pin Bushing	.30	31361	Short Lever Put-up (4 " Saw)	2
16872	Locking Pin	.15	31362	Short Lever Put-up (5 " Saw)	2



PARTS FOR ALL STEEL MITRE BOXES

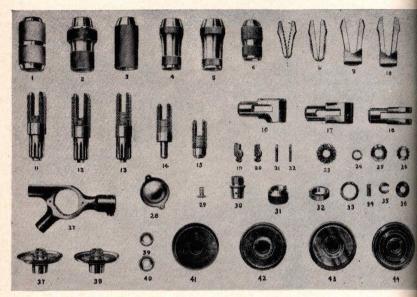
Nos. 1244C, 1264C, 1285C, 1305C and 1306C 1002C, 1003C and 1004C



	Part	Price each	ı No.	Part	Price each
			16877	Gib Indicator Pin	
588	Back—right hand	1.15	16889	Name Plate	
589	Back—left hand		16926	King Bolt	
617	Name Plate Screw	.10			
287	Washer (3)	.10	16927	King Bolt Lock Screw	
537	Elevator Put-up (2)	.35	25023	Depth Gauge (4 " Saw) (2)	
557	Length Gauge	.25	25025	Depth Gauge (5 " Saw) (2)	
060	Hex Nut	.10	25027	Depth Gauge (6" Saw) (2)	
294	Back Screw	.10	25352	Lever Clamp	
297	Fillister Head Screw	.10	25354	End Plate (2)	
304	Saw Stop (2)	.10	25359	Gib	.70
305	Saw Stop Screw (2)	.10	25361	Locking Lever	
318	Gib Plug Screw (2)	.10	31335	Saw Guide Put-up (4 " Saw) (2)	2.30
320	Depth Gauge Bent Washer (2)	.10	31336	Saw Guide, complete (5 " Saw) (2)	2.30
597	Round Head Screw	.10	31337	Saw Guide, complete (6" Saw) (2).	2.30
846	End Bracket Screw (2)	.15	31347	End Bracket (2)	.40
847	Depth Gauge Screw (2)	.15	31348	Leg (2)	.20
864	Binding Screw	.15	31353	Bottom Plate-right hand	.70
865	Gib Plug (2)	.10	31354	Bottom Plate-left hand	
868	End Plate Screw (4)	.10	31358	Long Lever Put-up (4 " Saw)	
869	Leg Screw (4)	.10	31359	Long Lever Put-up (5 " Saw)	
870	Leg Nut (4)	.10	31360	Long Lever Put-up (6" Saw)	
871			31361	Short Lever Put-up (4 " Saw)	
	Locking Pin Bushing		31362	Short Lever Put-up (5 " Saw)	
872	Locking Pin	.10	31363	Short Lever Put-up (6 " Saw)	
873	Locking Lever Bushing	THE RESERVE OF THE PARTY OF THE	40018		
874	Locking Pin Bushing Check Nut		40018	Bed Put-up	10.50
876	Locking Lever Spring	.10	The state of the s		



PARTS FOR BRACES



IMPORTANT: The number of the brace for which parts are wanted should be specified as well a the number of the part. If this information is not available make a sketch of the part showing dimension.

No.		Price eac
1	Chuck Shell for Nos. 5010, 5012	C. 15 TA 15
2	Chuck Shell for Nos. 770, 771, 772, 7312	1.80
3	Chuck Shell for Nos. 502, 730, 731, 732, 733	1.00
4	Chuck Shell for Nos. 31, 32, 33, 1321, 1322, 1323, 1324	.70
5	Chuck Shell for Nos. 1708, 1710, 1712	.6
6	Chuck Shell for Nos. 142, 1410, 1610	.60
7	Jaws for Nos. 142, 1410, 1610	
8	Jaws for Nos. 31, 32, 33, 1321, 1322, 1323, 1324, 1708, 1710, 1712	.6
9	Jaws for Nos. 502, 730, 731, 732, 733, 5010	.85
10	Jaws for Nos. 770, 771, 772, 7312	.85
11	Chuck Socket for Nos. 5010, 5012	.90
12	Chuck Socket for Nos. 730, 731, 732, 733, 770, 771, 772	1.00
13	Chuck Socket for Nos. 31, 32, 33, 1321, 1322, 1323, 1324	.60
14	Chuck Socket for Nos. 1410, 1610, 1708, 1710, 1712	.40
	Chal Sada Carlo 140	



PARTS FOR BRACES

No.		Price each
16	Crooked Socket for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324	\$1.00
17	Crooked Socket for Nos. 5010, 5012	1.20
18	Crooked Socket for Nos. 1410, 1610, 1708, 1710, 1712	.80
19	Ratchet Pawls for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 5010, 5012	Pair
	Ratchet Pawls for Nos. 1410, 1610, 1708, 1710, 1712	.25
20	Ratchet Pawl Pins for Nos. 1410, 1610, 1708, 1710, 1712	.10
21 22	Ratchet Pawl Pins for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 5010, 5012	.10
23	Gears for No. 502 (2)	Price each
24	Ratchet Chuck Socket Washer for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324	.15
25	Ratchet Chuck Socket Washer for Nos. 5010, 5012.	.25
26	Ratchet Gear for Nos. 1410, 1610, 1708, 1710, 1712	.15
27	Frame for No. 502	2.00
28	Cover for No. 502	.15
29	Ratchet Chuck Socket Screw for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 5010, 5012	.10
30	Quill for Nos. 142, 1410, 1610	.30
31	Boxed Ratchet Ring for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 1410, 1610, 1708, 1710, 1712, 5010, 5012	.20
32	Socket Ring Washer for Nos. 5010, 5012	.20
33	Socket Ring Washer for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324	.10
34	Ratchet Pawl Spring for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 1410, 1610, 1708, 1710, 1712, 5010, 5012	.10
35	Quill Washer for Nos. 31, 32, 33, 502, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 1708, 1710, 1712, 5010, 5012	.10
36	Ball Bearing Washer for Nos. 1708, 1710, 1712	.10
37	Quill for Nos. 31, 32, 33, 502, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 5010, 5012	.80
38	Quill for Nos. 1708, 1710, 1712	.60
39	Ball Race for Nos. 1708, 1710, 1712	.10
40	Ball Race for Nos. 31, 32, 33, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324, 5010, 5012	.10
41	Head for Nos. 142, 1410, 1610	.30
42	Head for Nos. 1708, 1710, 1712	.60
43	Head for Nos. 31, 32, 33, 502, 730, 731, 732, 733, 770, 771, 772, 1321, 1322, 1323, 1324	.80
44	Head for Nos. 5010, 5012	1.00

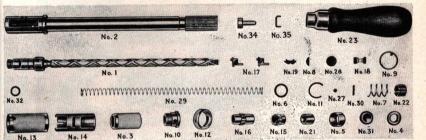


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PARTS FOR SPIRAL AUTOMATIC SCREW DRIVERS

Nos. 29, 61A, 62A, 67A, 610A, 620A, 670A

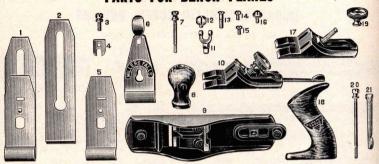


Please specify the number of the screw driver the parts wanted are to fit as well as the part number.

Part				Screw	Driver Number	r		
Number	Part Name	29	61A	62A	67A	610A	620A	670A
1	Chuck and Spiral	\$0.40	\$0.60	\$0.70	\$0.55	\$0.60	\$0.70	\$0.55
2	Frame, complete	.35	1.00	1.50	.80	1.00	1.50	.80
3	Chuck Shell	.25	.15	.15	.15	.15	.15	.15
4	Chuck Collar	.10	.10	.10	.10	.10	.10	.10
5	Chuck Cam		.10	.10		.10	.10	
6	Chuck Washer	Tive.	.10	.10		.10	.10	
7	Chuck Spring	.10	.10	.10	.10	.10	.10	.10
8	Blade Key	.10	.10	.10	.10	.10	.10	.10
9	Splined Washer		.10	.10	.10	.10	.10	.10
10	Frame Nut	.10	.25	.25	.25	.25	.25	.25
11	Spring Ring		.10	.10	.10	.10	.10	.10
12	Lock Cam		.50	.50	.30	.50	.50	.30
13	Shifter Sleeve	.20	.20	.30	.15	.20	.30	.15
14	Cam		.15	.20	.10	.15	.20	.10
15	Ratchet Nut-right hand	.20	.30	.30	.25	.30	.30	.25
16	Ratchet Nut-left hand	.20	.35	.35	.30	.35	.35	.30
17	Pawls (2)	.10	.20	.20	.20	.20	.20	.20
18	Pawl Springs	.10	.10	.10	.10	.10	.10	.10
19	Ratchet Key		.10	.10	.10	.10	.10	.10
20	Lock Balls (2)	.10	.10	.10	.10	.10	.10	.10
21	Stop Collar	.10	.10	.10	.10	.10	.10	.10
22	Handle Plug Screw					.10	.10	.10
23	Handle and Ferrule	.20	.35	.40	.35	.35	.40	.35
24	Blade, Small		_		- See Po	age 46 -		-
25	Blade, Medium	.15	-	Part of the	- See Po	age 46 -		
26	Blade, Large				- See Po	age 46 -		
27	Headless Set Screw		.10	.10	.10	.10	.10	.10
28	Stop Washer					.10	.10	.10
29	Q.R. Spiral Spring	.10		May		.10	.10	.10
30	Stop Collar Pin		.10	.10	.10	.10	.10	.10
31	Handle Cap Screw	.15				.20	.20	.20
32	Chuck Rings (2)	.10			.10			.10
34	Step (Wood plug)	.10						
35	Blade Key	.10						



PARTS FOR BENCH PLANES



Be sure and specify the number of plane parts wanted are to fit.

Pari		No. 8	No. 9	No. 10		No. 14	No. 15		No. 22	No. 24		
No.	Description of Part	No. 8C	No. 9C	No. 10C	No. 11		No. 15C		No. 22C	No. 24C	No. 814	No. 900
1	Double Iron						ee Page				1	V. C. S.
2	Single Iron	-					ee Page					
3	Frog Adj. Screw	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10	\$0.10		\$0.10		
4		.20	.20	.20	.20	.20	.20	.20	.20	.20	.15	.15
5		.45	.55	.60	.45	.55	.60	.60	.60	.60	.30	.30
6		.85	.90	1.00	.85	.90	1.00	1.00	1.00	1.00	.60	.60
7		.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
8	Plane Knob	.40	.40	.40	.40	.40	.40	.40	.40	.40	.15	.15
9	Plane Bottom	3.20	3.20	3.80	3.80	3.80	3.80	5.30	7.50	9.00	1.75	1.45
10	Frog, complete	1.10	1.10	1.20	1.10	1.10	1.20	1.20	1.20	1.30	1.10	1.10
11	"Y" Adj. Lever	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
12		.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
13	Lever Cap Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
14	Frog Clip Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
15	Handle Screw			.10	.10	.10	.10	.10	.10	.10	.10	.10
16	Frog Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
17	Frog	.70	.70	.80	.70	.70	.80	.80	.80	.90	.70	.70
18	Plane Handle	.60	.60	.60	.60	.60	.60	.60	.60	.60	.35	.35
19	Adjusting Nut	.30	.30	.30	.30	.30	.30	.30	.30	.30	.20	.20
20	Handle Bolt and Nut.	.20	.20	.20	.20	.20	.20	.20	.20	.20	.15	.15
21	Lateral Adj. Lever	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
21	Laierai Mai. Lever	.20	.20	.20	.20	.20	.20				-	1

PARTS FOR NOS. 4 AND 85 RABBET PLANES

	PARIS FOR NOS. 4 AND 05 RADDEL I LANE		
No.	Name of Part	No. 4	No. 85
4304	Bottom		\$3.20
1001	Bottom, Top and Bottom, complete	\$0.80	
14232	Plane Iron	.40	.40
21266	Lever	.20	.20
12391	Lever Thumb Screw		.15
12247	Lever Screw	.10	.10
14231	Adjusting Lever	2	.25
14235	Adjusting Lever Screw		.10
14233	Rivet		.10
14234	Line Cutter (Spur)		.10
21265	Width Gauge		.65
		S LAST NO	.20
14221	Width Gauge Stop		.10
14219	Width Gauge Lock Screw		.40
21264	Depth Gauge		.20
14220	Depth Gauge Lock Screw		.20

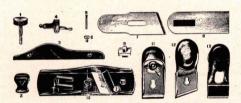


PARTS FOR BLOCK PLANES



Be sure to specify the number of plane parts wanted are to fit.

A 10 (5 C)								
Description of Part	No. 16	No. 17	No. 36	No. 37	No. 56	No. 57	No. 206	No. 700
Adjusting Nut		\$0.20	\$0.20	\$0.20	\$0.20	\$0.20	\$0.20	\$0.20
Lever Cap		.50			.50	.50		
Finger Rest Knob.		.20	.20	.20	.20	.20	.20	.20
Lever Cap	AND THE RESERVE TO SERVE THE PROPERTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN	1.1	1.10	1.10			1.00	
Adi, Lever Pin		.05	.05	.05	.05	.05	.05	.05
Adjusting Nut		.20	.20	.20	.20	.20	.20	.20
Frog, complete					.20	.20		
Eccentric Plate		.20	.20	.20	.20	.20		
Lateral Adj. Lever		.20	.20	.20	.20	.20		
Bottom		2.30	2.30	2.30	2.30	2.30	2.50	1.75
Lever Cap Screw	A STATE OF THE PARTY OF THE PAR	.10	.10	.10	.10	.10	.10	.10
Single Plane Iron		.55	.55	.55	.55	.55	.55	.55
Adjusting Lever		.10	.10	.10			.10	

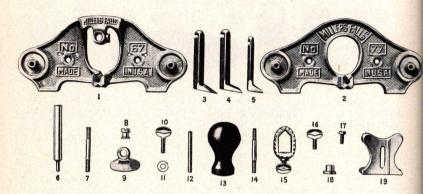


Be sure to specify the number of plane parts wanted are to fit.

Part No.	Description of Part	No. 5	No. 07	No. 33	No. 45	No. 55	No. 68	No. 75	No. 87	No. 97
1	Adjusting Nut		\$0.20		\$0.20			\$0.20		
2	Plane Knob		.20		.20		\$0.20	.20	\$0.20	\$0.20
3	Detachable Side		.50			Fr				
4			.20		.20	\$0.30		.20		.30
5			.05	(100.00)	.05	.05		.05		.05
6			.20							
7	Single Plane Iron		.70							
8		\$0.30		\$0.20	.55	.40	.40	.55	.40	.55
9	A STATE OF THE PARTY OF THE PAR		.25	46.77	.25		-	.25		
10	Plane Bottom	.80	2.50	.60	1.25	.80	2.25	1.35	1.25	1.50
11	Lever Cap				.50			.50		
12	Lever Cap		.40							
	Lever Cap	.40		.20		.40	.40		.65	.40



PARTS FOR NOS. 67 AND 77 ROUTER PLANES



When ordering parts please be sure and give the number of the screw driver the parts are to fit as well as the part number.

Part No.		No. 67	No. 7
1	Plane Bottom		140.7
2			\$2.6
3			.6
4			.6
5	Cutter, ¼ "	60	.6
6			
7	Handle Stud	15	.1
8			
9	Throat Attachment	25	
10			
11			
12	Cutter Adjusting Screw		.2
13			.3
14	Handle Stud	15	
15			.5
16	Cutter Clamp Screw	.10	.1
17		10	.1
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